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AUTHORIZATION OF THE AIRPORT AND AIRWAY TRUST FUND

HEARINGS

BEFORE THE

SUBCOMMITTEE ON AVIATION

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

ONE HUNDREDTH CONGRESS

FIRST SESSION

ON

REAUTHORIZATION OF THE AIRPORT AND AIRWAY TRUST FUND

MARCH 26, APRIL 7, 8, AND 20, 1987

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AUTHORIZATION OF THE AIRPORT AND AIRWAY TRUST FUND

THURSDAY, MARCH 26, 1987

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE AND TRANSPORTATION,
SUBCOMMITTEE ON AVIATION,
Washington, DC.

The committee met, pursuant to notice, at 9:40 a.m., in room SR-253, Russell Senate Office Building, Hon. Wendell Ford (chairman of the subcommittee) presiding.

Staff members assigned to these hearings: Steve Palmer and Harris Livingstain, professional staff members; and Patty Hahn, minority professional staff member.

OPENING STATEMENT OF SENATOR FORD

Senator FORD. I'm going to attempt to get started, with Senator Kassebaum's approval, with my opening statement.

If she has an opening statement, it can be read and then hopefully, our first witnesses will be here.

With today's hearing, I am pleased to begin the Aviation Subcommittee's consideration of the reauthorization of the Airport and Airway Trust Fund and the programs that it supports.

We begin these hearings late in the year. On September 30th, which is only 6 months away, the current legislation expires, and with it, the authority to ensure continued growth and improvement to our aviation system.

As a result the legislation that we put together this year must not only be effective but it must also be completed expeditiously.

These are critical hearings because we are, in my opinion, at a crossroads. The Trust Fund, which is supported by an 8 percent passenger ticket tax and general aviation fuel taxes, is projected to reach the $10 billion mark by the end of this fiscal year, and more than half of that, $5.6 billion, will be surplus.

Let me just reemphasize that if I may. More than half of the money in the Trust Fund, $5.6 billion, will be surplus.

The two major programs funded by the Trust Fund are the Airport Improvement Program and the National Airspace System Plan. Both are designed to expand the capacity of our nation's airports and airways while maximizing aviation safety. Yet over the past five years, they have not been fully funded.

Administration funding requests below our authorized levels, Congressional pressure to reduce the Federal budget deficit, and unrealistic schedules for many of the NAS Plan projects, all have combined to create the massive surplus that must be addressed in our bill this year.

Several legislative proposals have been offered thus far. One has come from the Committee's ranking minority Member, Senator Danforth. Another from Senator Chiles, who will testify this morning before this subcommittee. And of course the Administration has transmitted its proposal for continuing these critical programs.

Let me say that I believe these are all valuable approaches, and I hope that we can incorporate a number of provisions proposed in these bills into the subcommittee bill during the coming weeks. This will enable us to take a strong bipartisan bill before the full committee, hopefully in mid-May.

It is my hope that our bill will then move quickly to the Senate floor and on to conference, and well in advance of the end of this fiscal year. Then we can be assured that the money in the trust fund will be put to its intended use.

Beating the September 30th deadline will not be an easy job. Twice since the Trust Fund was created in 1970, we have seen the authorization lapse, putting these critical programs on hold. And we need only to look to the highway bill for more current evidence that major transportation funding bills can generate trouble.

But I intend to do all I can to see that we get a good bill. I feel strongly about the need for effective use of the trust fund to increase aviation safety, expand airport capacity, and enhance the efficiency of our air transportation system.

I feel even more strongly that if we can't get the money out of the trust fund, then we shouldn't continue to collect the taxes. It's just that plain and simple with me.

Before I go any further, I would like to take this opportunity this morning to express my appreciation for a job well done by Admiral Engen. Admiral Engen inherited enormous problems when he became administrator in 1984. He has managed to improve the system and his handling of the well respected FAA staff.

Admiral, you have had one of the worst jobs in this country during the last three years, and I want to thank you for your dedication, hard work, and all of the decisions you have made to make this system better.

You are unsurpassed in your ability to work with the Congress, and you are certainly going to be missed, and from this Chairman, Admiral, my thanks.

Senator Kassebaum?

OPENING STATEMENT BY SENATOR KASSEBAUM

Senator **Kassebaum**. Thank you, Mr. Chairman.

I want to second most of your remarks and to mention that I valued your support when I was chairing the committee. We started these reauthorization hearings with the field hearing at O'Hare which you and Senator Exon and I held.

I share your belief that this is a very important opportunity for us to examine the critical juncture where we are today in the development of our airways system.

I think it is crucial that we carefully evaluate the NAS plan and our airport improvement program, and I would agree with you that if we can't get the money from the trust fund, then we shouldn't continue to collect the taxes.

I value the opportunity to work with you in these hearings and join with you, certainly, in expressing my admiration for Admiral Engen and the work he has done at the Federal Aviation Administration.

He stepped in at a difficult time. He has taken the FAA and all of the myriad problems that have arisen as we adopt the changes that are occurring in the system and worked with extraordinary dedication to solve these problems and to restore confidence here on the Hill. He has done all this with a very calm manner but nonetheless has shown that we can successfully meet the challenges that are posed to us today in aviation.

I agree with you that his leadership will be sorely missed, and for all of us who have worked with him at the Federal Aviation Administration, we want to indicate our deep gratitude and appreciation.

Thank you, Mr. Chairman.

Senator FORD. Thank you, Senator.

Senator McCain, do you have an opening statement?

Senator McCAIN. No thank you, Mr. Chairman.

Senator FORD. Senator Hollings has an opening statement that he would like to have included in the record.

[The statement follows:]

OPENING STATEMENT BY THE CHAIRMAN

Mr. Chairman: Today, the Aviation Subcommittee formally begins its efforts to reauthorize one of the most important aviation programs in the United States—the Airport and Airway Improvement Program and the Trust Fund.

In 1970, Congress looked into the future of American aviation and saw the challenges that projected growth would bring—increased airline travel and an increased need for expanded capacity of our aiports and airways. Our response was to create a trust fund from a tax on passenger airline tickets and general aviation fuel and earmark the money collected for the development and expansion of airports and our air traffic control system.

Toward the end of that decade, airline deregulation brought renewed concerns about the system's capacity to transport increasing numbers of passengers both safely and without delay. Congress attempted to deal with these concerns in the 1982 Airport and Airway Improvement Act, our most recent authorization of the Trust Fund.

Now, here we are in 1987, and what do we find? We find that our projections were correct—the aviation industry *has* grown, the number of passenger miles is constantly increasing, and the need for expanded capacity has materialized.

What's troubling is that the problems we had anticipated years ago have occurred anyway. Shortages of personnel and modern equipment in our air traffic control system, as well as inadequate airport facilities, have caused widespread schedule crowding and delays among passenger airlines. More importantly, the margin of safety is falling.

Most disturbing of all, we've had the money on hand to avoid these problems. The current balance in the Trust Fund is more than $9 billion. Five billion dollars of that is currently unobligated.

During two days of hearings before this Subcommittee in January, there was an overwhelming concensus among FAA officials, airline industry executives, and labor leaders that money from the Trust Fund would go a long way toward increasing the margin of safety, eliminating delays, and expanding capacity at the nation's airports.

Why, then, has the Administration resisted important capital improvement expenditures aimed at resolving these problems? Could it be that the Office of Management and Budget enjoys using the Trust Fund's huge surplus to keep the overall budget deficit from looking worse than it already is? Must we play these ridiculous little games?

The airline passengers of this nation have paid into the Trust Fund for years. Many of them have paid over and over. Yet they continue to be served by an aviation system that is not safe or as convenient as it should be. This is because the government has not fulfilled its reponsibility to appropriate the collected revenues to their intended use.

That's going to change, and we're going to begin right here today at this hearing. I look forward to the testimony of today's witnesses and to the speedy approval of an authorization bill that will get this Trust Fund, and our nation's airports and airways, back on the track.

Senator FORD. We've just been informed that both of the Senators who are testifying are on their way. I hate to hold up this hearing. We have two votes at 10:30 that will be back-to-back. I think that will jeopardize this hearing somewhat this morning.

I see that Senator Humphrey has arrived. We've been waiting 15, almost 20 minutes. We were getting ready to go ahead without you.

STATEMENT OF HON. GORDON J. HUMPHREY, U.S. SENATOR FROM NEW HAMPSHIRE

Senator HUMPHREY. I understand. I apologize to the Chairman. I have four simultaneous obligations this morning.

Senator FORD. The National Institute on Science or whatever it is, is working on cloning.

Senator HUMPHREY. That could be good, and it could be bad.

Senator FORD. I don't know if you could stand four of me.

Senator HUMPHREY. Mr. Chairman, I have a lifelong interest in aviation. Before coming to the Senate, I spent a total of 13 years in that profession, including 10 years as a commercial airline copilot. Now I'm a frequent airline passenger, as we all are, and an occasional general aviation pilot.

I've observed the growth in the problems of aviation from the cockpits of the commercial airliner, general aviation aircraft, and the passenger seat of—I just said all that. Staff are sometimes redundant.

Let's see, what do I really want to say here. Let's cut out some of this stuff.

The air traffic control system has not been modernized or expanded at the pace necessary to handle the growth in traffic.

Ironically, funds to modernize and expand the air traffic control system are available now. Surplus in the trust fund will reach $5.6 big ones, billions, by September, according to GAO estimates the unused balance could reach $12.4 billion by 1990.

These funds are collected to upgrade the aviation infrastruture, but Congress and the Administration have inpounded them to make the deficit look smaller.

Rather dishonest, don't you think? I think we ought to repeal the tax, by the way, unless we're going to spend the money.

Senator FORD. You and I agree.

Senator HUMPHREY. Good.

Recently, the Administration submitted its proposal to reauthorize the airport and airway improvement programs, including a system of user taxes.

It has essentially repeated the expiring 1982 legislation.

I think we ought to take this opportunity—I would suggest and respectfully urge the Chair and the Members to take this opportunity, the opportunity of reauthorization, to make some fundamental changes in the program.

And I propose to you that you consider transferring the air traffic control system functions, as opposed to air safety regulation, to an independent government corporation.

In short, I recommend that we free the air traffic control system from the inflexible rules of the bureaucracy, while allowing it to respond promptly to the new demands of the deregulated airline industry.

And independent corporation would have the authority to borrow, and could sue and be sued. The corporation would be headed by a president with a board of directors supplying policy direction.

In addition, a technical advisory committee representing all elements including general aviation, will advise the president on aviation needs.

A version of this proposal was put forth by the Air Transport Association last year, but it's not an idea that anyone has a copyright on. It's a generic idea. It's been offered in several versions.

I do believe there's an awful lot of merit to it. It makes a great deal of sense, at least to this one Senator, and it would free the air traffic control system from the bureaucracy, from the micro-management of Congress, from the yearly games of the budget process.

And I believe it would go a long ways toward reducing the air traffic delays which have become a plague on our system.

Delays are mostly caused by weather, and there's a certain—that's a constant. But at the same time, delays are growing worse for reasons beyond the weather, unless the weather is somehow getting worse every year, and I don't think that's the case.

And the explanation of this trend toward greater and greater air traffic control delays and cancellations and so on with which we are only too familiar as frequent travellers, the explanation is in part the antiquation and inadequacy of the air traffic control system, which in turn is a direct result of the bind in which the air traffic control system is caught under present rules.

And I think we ought to spring the system free. We ought to take deregulation of the air transport system a step further, and in a sense, deregulate the air traffic control system by either privatizing it in the true sense of the word, or setting up a quasi governmental corporation, which is the Air Transport Association proposal, and break it out of this bind which is causing so many problems and at great economic cost.

Senator Ford. Thank you, Senator Humphrey.

We will hear right after you the statement of the Senator from Florida, who is also the Chairman of the Budget Committee. I think we are all somewhat frustrated, those of us who are frequent passengers, to fly into an airport where they've got their work maybe 50 percent completed and they're waiting for their next installment of Federal funding.

It's very difficult. Some airports have gone as far as they can with bonding and borrowing. You and I sit here with some sort of frustration, I suspect, with over $5 billion surplus in the Trust Fund.

You and I seem to think alike that if we're not going to spend that money, we might as well stop charging those taxes.

Knowing of your reputation as a fiscal conservative, would you entertain some additional funding beyond what the Administration has proposed, as it relates to expediting the development of airports replacing the antiquated air traffic control equipment?

Senator HUMPHREY. I would, Mr. Chairman.

I should have added to my testimony, the problem isn't only ATC in terms of staffing levels and equipment. It is also concrete. We don't have enough concrete out there. We're not improving the airports, the physical facilities on the ground.

And I do believe we need to spend that money.

Senator FORD. Well, you're mighty nice to come today, and I appreciate you're doing that. We're going to do our best to put out a good bill, and look forward to—if it's good enough, that you'll support it.

I do thank you this morning, Senator.

Senator HUMPHREY. Thank you for the opportunity. And again, I apologize to all for being late this morning.

Thank you.

[The statement follows:]

STATEMENT OF HON. GORDON J. HUMPHREY, U.S. SENATOR FROM NEW HAMPSHIRE

Mr. Chairman, Thank you for the opportunity to testify.

I have had a life-long interest in aviation. Before coming to the Senate, I spent a total of 13 years in aviation including 10 years as a commercial airline copilot. Now, I am a frequent airline passenger, and an occasional general aviation pilot.

I have observed the growth—and problems—of aviation from the cockpits of the commercial airliner, general aviation aircraft and the passenger seat of a commercial jetliner. I know first hand the frustrations of all parties involved.

Last year, bad weather, dramatic increases in traffic, air carrier scheduling, and an air traffic control system unable to handle the resulting complications wasted some 2,000 hours of airliner productivity each day. That's the equivalent of grounding about 250 airliners per year, roughly an airline the size of Delta. General aviation pilots and passengers get stuck in the same traffic jams.

The Air Traffic Control System has not been modernized or expanded at the pace necessary to handle the growth in traffic. While some new equipment has been installed, parts of the Federal Aviation Administration [FAA] plan to update the ATC system have been delayed for up to 10 yeras, according to the General Accounting Office [GAO], and to compound the problem further, there are too few fully qualified air traffic controllers.

Ironically, funds to modernize and expand the Air Traffic Control System are available now. The surplus in the Aviation Trust Fund will reach $5.6 billion by September, and, according to GAO estimates, the unused balance could approximate $12.4 billion by 1990.

The Trust Fund is supported by all aviation users, airline passengers and general aviation. These funds were collected to upgrade the aviation infrastructure, but Congress and the administration have impounded them, in an effort to make the Federal deficit look smaller. Each dollar of surplus in the Trust Fund offsets a dollar of deficit elsewhere in the Federal budget.

In short, air traffic is tied up, and ATC is tied down, its funds held hostage.

Mr. Chairman, to tax the American people and not deliver the product promised is just wrong. While there have been efforts in the House to cut the aviation taxes if the dollars in the Trust Fund aren't spent—that doesn't solve the real problem of improving the air traffic and airport infrastructure. As Members of Congress, we should do better.

Recently, the administration submitted its proposal to reauthorize the airport and airway improvement programs, including a system of user taxes to finance those programs. It is essentially a repeat of the expiring 1982 legislation, which despite all the promises made at that time, has not lived up to the expectation of the aviation community.

Mr. Chairman, rather than just more of the same, I suggst we get to the heart of the issue. I believe we must look toward a fundamental change in the airport/airway authorization. Specifically, I propose that we transfer air traffic control functions to an independent Government corporation.

In short, an air traffic control corporation would free the Air Traffic Control System from the inflexible rules of bureaucracy, while allowing prompt response to the economic demands of its users.

An independent corporation would have the authority to borrow, and could sue and be sued. The corporation would be headed by a president with a board of directors supplying policy direction. In addition, a technical advisory committee, representing all elements of aviation, will advise the President on aviation needs. Close cooperation with the Department of Defense would continue. The present system of aviation taxes would also continue, and the authority would be empowered to levy user fees as does any corporation.

Initially proposed last year by the Air Transport Association, a Government corporation to provide air traffic control services has many advantages:

First, the Trust Fund would be used for the corporation's operating expenses, including hiring additional controllers and financing desperately-needed modernization and expansion. Aviation taxes would flow back to the consumer in the form of increased aviation safety and capacity, to the benefit of all users, airline passengers and general aviation alike.

Second, the ATC, free from micromanagement by Congress and Federal bureaucrats, would be able to respond more quickly to traffic growth.

Third, ATC would no longer be restricted by the redtape of Federal procurement regulations, and could bring on innovative technology at a faster pace and at a lower cost.

Fourth, ATC employees would no longer be subject to rigid civil service rules and regulations. The corporation could set up its own personnel management system, avoiding, for example, another disastrous air traffic controllers' strike.

Fifth, ATC employees would enjoy greater professional satisfaction as new equipment and adequate staffing levels, phase in.

Mr. Chairman, the public wants to fly in increasing numbers. The demand is there and the infrastructure to support the demand should be there. The "business-as-usual" approach did not work in 1982, and won't work this year. Federal budget deficit problems have not been solved, and the Appropriations Committees may ignore higher authorization levels.

I ask the subcommittee to explore the alternative of a Government corporation under the terms I have outlined.

While I believe that regulation of air safety is an inherent Federal responsibility, running an air traffic control system is not. An autonomous ATC corporation could unsnarl air traffic, leaving the residual FAA to concentrate exclusively on the enforcement of safety regulations.

Senator FORD. Senator Chiles, you may submit your statement for the record and highlight it or whatever you wish to do. It's up to you.

STATEMENT OF HON. LAWTON CHILES, U.S. SENATOR FROM FLORIDA

Senator CHILES. Thank you.

Mr. Chairman, I want to apologize for being late. I got stuck in another meeting in which I got called on a little late.

Senator FORD. I understand very well, because I was part of that problem.

Senator CHILES. People had some pretty hard questions for me before I could kind of get away from that, Mr. Chairman.

I appreciate the chance to speak to you this morning. I think you, Mr. Chairman, and your committee, certainly have a very important challenge before you.

The rapid increase in traffic has certainly strained the capacity of our nation's air system, and we see that strain in delayed flights, in crowded airports.

But it's not just an inconvenience for the air traveller. We know it's now one of really safety that we're talking about.

We don't have enough airports. We don't have enough runways. The air traffic control system is old and overcrowded. And we have these aviation trust funds that lie unused.

Eighty-four near misses were reported last year in Florida. Sixteen took place between West Palm Beach and Miami, a fast-growing region where construction and development are squeezing space for airport expansion.

It's sad to say that Florida was number two of all states last year in near catastrophes. If we don't act and act fast, we'll never have enough runways, enough airports to meet the needs of growth areas such as Florida.

In my state, we just can't keep up. All of our airports are behind any kind of planning schedule that they thought they would have.

I was just at Orlando recently. That virtually is sort of a new terminal, a new airport. And at the time that they built it, they thought that their present construction would last them into the late 1990s, 1998.

There, where they are on their growth chart, they have already surpassed it now, and are behind where they thought they would be in the late 1990s. And it just is exploding on them faster and faster.

All across the country airports are right now operating at critical capacity. I have introduced legislation to try to make better use of the trust fund revenues to increase the capacity and safety of the aviation system.

It would reauthorize the Airport and Airway Improvement Act for an additional five years. And while based on current law it makes improvements in current programs to make them more flexible.

It increases funding levels for airport grants, and for modernization of the air traffic control system.

It tries to address key air space safety issues such as designation of special use airspace and construction of tall tower strutures.

That proposed bill sets authorization levels at the anticipated level of revenues, including interest income, into the trust fund.

Airport grants are increased 20 percent, with a base authorization of $1.2 billion.

Facilities and equipment levels are $1.5 billion in the first year, and $1.6 billion in the following year; and the Federal Aviation Administration is allowed to use trust fund revenues for operations, but only within the current penalty formula, which provides an incentive for capital improvements.

Most importantly, the bill expands the flexibility of the airport improvement program so that we can get needed construction underway.

And all of these, Mr. Chairman, are suggestions to this committee which will be charged with the responsibility of writing a final bill, and I'm sure you will all be studying all of this.

But I think the thrust of what I'm trying to put forward, maybe one of the most important things is allowing for an advanced construction option to let airports with local or state funds available begin construction.

Let them be reimbursed later. We have seen how this has happened in our highway programs. It has worked very well.

Also, I would hope that your legislation would come out and would adopt a land acquisition revolving fund, which would be established to buy land for future airport expansion or new airport construction.

We need to do all we can today to encourage land acquisition. We know that these land prices are exploding. And certainly around an airport. And the more traffic that airport is getting, the more it's going to be the hub of somewhere where that land is going to cost you tremendous amounts of money in the future.

We're right now building a new runway in Orlando and planning for the next one that they think they have to build. And if we could purchase that land now or tie it up, everybody would save tremendous sums of money, as opposed to if that funding comes six years down the line, or eight years or ten years down the line.

So by establishing this revolving loan fund, with payment back into the fund when actual construction begins, then we can encourage communities to plan for the future.

This would be a fund that would be revolving. Communities could use that. The money would be paid back as they start the construction. It allows you to continue to use it.

I think you should consider critical capacity needs as a priority for discretionary grant funding. Funding would be targeted to airports either at those with full capacity, or those that soon would be.

A state general aviation form of the funds would be distributed on the basis of need, in addition to the current formula on land area and population.

There has to be something that triggers and takes in this increased capacity, or states like mine just will—be behind forever.

Expanded eligibility is provided for by pavement maintenance and limited ground access construction.

The legislation I proposed also addresses the problem of tall tower structures. Last month, an experienced pilot was killed near Venice, Florida. He flew into a radio tower.

This incident is repeated over and over in my state. We lost two or three of our finest young lawyers that went into a tower in Gainesville a few years back.

There has to be some way, by changing tower licensing procedure, the bill provides an incentive for license applicants to limit the impact on aviation.

In addition, the bill calls for a joint review of all special use military airspace by the Department of Defense and the Department of Transportation.

We know that military needs must be met. But the present methods of designated special use airspace are inadequate. And the General Accounting Office, I know, is also looking at this problem.

I'm concerned also about national airspace planning. The bill would extend the planning horizon from 10 to 20 years. In updating the national airport plan, the need of air cargo, helicopter, and short takeoff and landing operations also should be addressed.

Mr. Chairman, as I said earlier, you and your committee have a most challenging and important task. I want to commend you and your committee on your leadership and the extensive hearings that you've planned.

I understand that you're going to Denver soon to learn first-hand the problems facing communities as they build new airports. You will hear about capacity and air safety problems for those who use the system.

I hope you and your committee will visit some of our air facilities in Florida, and see and listen to some of those airport managers talk about some of the problems that they're facing, and see, sort of on the ground, some of the problems that they're having.

Part of the bill that I've introduced I think sets some of these problems out. Your committee will probably find many more.

These areas that we have tried to list are not anything that I've dreamed up. They're all coming from talking to the managers and the people that are involved in our airports in Florida.

I encourage you and your committee to look carefully at these provisions as you begin to draw you own bill, and I know that you will.

Senator FORD. Thank you, Senator Chiles.

Other Senators are asking some of the same basic things you are, that we use money now and be repaid later. We have heard from two or three other airports in this situation.

We apologize for not coming to Florida, but we thought the snow would still be on the ground in Vail. But apparently the weather is so warm, we won't be able to get there.

Senator CHILES. Well, I heard it was good last week, so hurry.

Senator FORD. Well, we're going to find out.

You have one of the hardest jobs in the world—and I say world, because you're chairman of our Budget Committee.

Your bill proposes more money than the Administration proposes in theirs, some $200 million more. Do you really think this would be enough, based on your knowledge of one state, when we look at the country as a whole?

Senator CHILES. No, sir. I think that we could use more. But I think the question is, we are balancing off. We're balancing off a situation in which we are staving off bankruptcy on the budget on one hand, and trying to get control of our deficit.

We're also trying to stop a practice that was built up of creating these huge trust funds and locking the money in so that the money could not be used .

So I think in that balancing procedure, if you ask me, is more money needed? Absolutely it's needed, certainly more than the $200 million additional that I have put in.

On the other hand, as you try to balance off and look at it from the entire spectrum of how you're going to do this at the same time that you're going to try to get control over your deficit, I thought this was a way of starting.

Senator FORD. Well, Senator, there's a lot of sentiment for, if you're not going to spend it, to quit taxing.

Senator CHILES. Yes, sir.

Senator FORD. And that is an 8 percent tax on all passengers.

Senator CHILES. Yes, sir.

Senator FORD. Those who fly, want it to be safe. They expect that 8 percent going to the Trust Fund. That is what it's designated for. However it's being held up to offset the deficit, while at the same time trying to pay to have some more airports, larger space, and to meet the critical needs.

So there is going to be, I think, a lot of sentiment, to move it off-budget so we can get into an arena where we can begin to spend that money for what it's supposed to be used for.

Senator CHILES. I would just say that I think you have to phase into that, Mr. Chairman. I don't disagree—you know, I took the position we ought to spend it all until I got to be chairman of the Budget Committee.

Senator FORD. Well, since I'm not chairman of the Budget Committee, I'll give you an opportunity to restrain me.

Senator Kassebaum?

Senator KASSEBAUM. Thank you, Mr. Chairman.

I have enormous respect for my chairman of the Budget Committee, and I know that he understands the budget process better than almost anyone else. He also knows, I think, that no matter what we might write in the authorizing legislation, it doesn't necessarily guarantee the end result if previous experience is any guide.

Do you have in your legislation—and let me say that I think there are some very constructive ideas in your bill—any way to guarantee that what one does write in the authorizing legislation will free up the trust fund monies?

Senator CHILES. No, I don't have a way of guaranteeing that. But I think there is strong sentiment, as the chairman has indicated, that an awful lot of the Members feel we should be spending more of this money.

I think what you do authorize is going to have great persuasion, in effect, on the appropriations committees.

Senator KASSEBAUM. Well, as you know, the administration has recommended a billion dollar spending increase in 1988 above 1987, from trust fund monies. I think that under the Administration proposal about 75 percent of O&M will now be financed from the trust fund, compared to the current 25 percent.

Now this poses some problems for the airport improvement program.

Senator CHILES. Well, I think it does. Because I think, again, what the Administration is trying to do is to use trust fund monies, but they want to use it for PAA operating expenses as opposed to using money from the General Revenue Fund for that.

Senator KASSEBAUM. Would you support increased general revenue monies?

Senator CHILES. I think that that's something that you should look at strongly, and I hate to see us invade the Trust Fund monies for operations when you can use it for the infrastructure that is so desperately needed.

It wasn't put in there for that purpose to start with. I don't think that that would be very wise in the long run.

Senator KASSEBAUM. Wearing another hat, you are chairman of the transportation subcommittee, is that correct, appropriations?

Senator CHILES. No, I'm on that subcommittee, but I didn't take that chairmanship.

Senator KASSEBAUM. Well, nevertheless, let me ask you. Is it correct that our 302(b) budget allocation means that we set a functional total that goes to transportation, and that money must be allocated in the transportation subcommittee.

And trust fund monies cannot be counted at that point; is that correct?

Senator CHILES. Well, it could not be counted unless you had authorizing legislation that allowed it to be. And then I think it could be then.

Senator KASSEBAUM. Would that be of help?

Senator CHILES. Well, I think what it would do is——

Senator KASSEBAUM. As far as assuring you that the Trust Fund would provide revenues as the subcommittee divided available monies among highways, aviation, Coast Guard?

Senator CHILES. It could be some help that way if you said you wanted to change the philosophy and go ahead and use more of the trust fund money for operating funds.

I think the other side of that sword is, you would have less and less proposed for operating funds out of general revenues for FAA O&M costs. Then they would say, let's just sop up some of that money that's in the trust fund and use that. That would ultimately mean that you would have less money for your infrastructure, which is where we so desperately need it.

Senator KASSEBAUM. Well, I just wondered if there was any way that——

Senator CHILES. As a short-term fix, it might be good.

Senator KASSEBAUM [continuing]. That the 302(b) allocation procedure hampers this function of the subcommittee.

Senator CHILES. I'd have to check that to give you a better answer on that.

Senator KASSEBAUM. And I don't know whether changing the budget treatment of the Trust Fund would cure the problem. But it seems to me when we make that assumption as a function, then we do run some problems when it comes to appropations.

Senator CHILES. When the allocation is made, that allocation is made to the subcommittee. It is not broken down to the subcommittee by so much for mass transit, so much for this. It's really to the discretion of the subcommittee, how they want to use the money allocated under 302(b).

So I don't see this would change it that much.

Senator KASSEBAUM. Thank you, Mr. Chairman.

Senator FORD. Senator McCain?

Senator MCCAIN. Thank you, Mr. Chairman.

I would just like to express my support for many of the provisions that Senator Chiles has in his proposed legislation. I also come from a rapidly growing state where we are very far behind in our facilities to take care of the ever growing increase in air traffic.

I also think it's important to point out that, as I understand Senator Chiles' provisions, they're not just for rapidly growing states. There are areas that are being set up across this country as hubs, whether they be in the Sun Belt or in places like Kansas City or others that are badly in need of additional fundings.

Senator CHILES. That would be true in Charlotte. That would be true in all of your hubs. And one of the things, of course, the airlines are trying to do now is, they are decentralizing some of those hubs, as you know, and getting out of Atlanta, for example. They're looking at Jacksonville as a hub now.

Senator MCCAIN. Recently, Nashville, Tennessee is being used as one. So I don't view Senator Chiles legislation as being regionally oriented, but it is oriented toward areas which are very badly in need, if we are ever going to relieve some of the problems that were rather graphically demonstrated by Senator Humphrey in his remarks.

And we're not going to be able to relieve Atlanta and Denver and Dallas unless we provide the much needed funding for this rapid expansion that's going on, and I hope that Senator Chiles' legislation would be seriously considered, because it appears to me that there is not a lack of prior planning or consideration of future growth as much as there is a need for funding for present needs.

And I thank you, Senator, for presenting this important legislation.

Senator CHILES. Thank you, sir.

Senator MCCAIN. Thank you, Mr. Chairman.

Senator FORD. I have no further questions.

Senator CHILES. Thank you.

Senator FORD. Thank you for coming. And we may be back in touch with you, Senator, about this.

Senator CHILES. Mr. Chairman, I found a long time ago that if you weren't on the committee, the happiest thing that could happen to you is that you would have something in your bill that the Committee would put in theirs.

And I hope you will feel free to use anything you can.

Senator FORD. There's an old saying, Senator, that a Congressman's wife woke up one evening and heard somebody downstairs. And she shook her husband and said, "Husband, there's a thief in the house." And he shook his head, and she said, "There's a thief in the house, wake up." He said: "There can't be. They're all in the Senate."

So we'll try to steal something from your bill.

Senator CHILES. Thank you.

Senator FORD. Now we'll go to Secretary Burnley and Admiral Engen, and we'll have about 15 or so minutes for the beginning of their testimony, then vote, and hopefully we will be back very quickly.

So Mr. Secretary, you may proceed.

STATEMENT OF HON. JAMES E. BURNLEY, IV, DEPUTY SECRETARY, DEPARTMENT OF TRANSPORTATION, ACCOMPANIED BY HON. DONALD ENGEN, ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

Mr. BURNLEY. Thank you, Mr. Chairman, and Members of the subcommittee.

I'm very pleased to have the opportunity to appear today to testify on the Airport and Airway Enhancement Act of 1987. We do look forward to working with the aviation subcommittee under your leadership, Senator, and we are anxious to be as cooperative as we can in coming up with a mutually satisfactory reauthorization package.

As you have noted, with me today is Admiral Engen, the FAA Administrator, and we will both be fully available to you to answer any questions you may have.

If I may, I'd like to submit a full statement for the record.

Our proposal for renewal and improvement of the Airport and Airway Improvement Act of 1982, we believe, will assure a safe, efficient national aviation system, fully equipped to meet the expanding needs of one of the most dynamic industries in the country.

We try to achieve that goal in two ways. First, the President's fiscal year 1988 budget reflected in this legislation would increase aviation safety, security, and capacity enhancement funding by about 20 percent over current levels.

Second, the bill would focus Federal airport grant funds on enhancing the capacity of the airport and airway system while providing state governments and local airport operators with increased flexibility and authority over airport development.

The aviation industry has grown more rapidly than anyone could have predicted at the time the Airline Deregulation Act was passed in 1978.

Domestic passenger miles have increased more than 50 percent since 1978. The Brookings Institution recently published a study estimating $6 billion in benefits per year to travellers from economic deregulation.

Clearly, deregulation has been a magnificent success without any adverse impact on safety. In fact, the aviation safety record since 1978 for every category of domestic aviation has been one of dramatic improvement.

The accident rate for our larger airlines, the Part 121 carriers, has been cut in half over the last eight years, compared to the eight years preceding deregulation.

Last year over 400 million passengers flew on U.S. carriers without a single fatality.

Also, commuter airlines had the lowest fatality rates since separate records were first compiled for them in 1975. And general aviation set new records for safety in every statistical category used by the National Transportation Safety Board.

And we're very proud of this record and we believe the numerous steps taken in recent years by Secretary Dole and the leadership of the FAA have contributed to this success story.

The rebuilding of the air traffic controller workforce has virtually been completed, and the Secretary has repeatedly told Admiral Engen he will get as many additional controllers as he believes he needs.

Our inspector workforce is at an all time high, and the inspection procedures have been completely revamped. Major passenger safety and security rulemakings have been vigorously pursued, with final rules promulgated over the last two years on flammability criteria for aircraft cabin interiors, smoke detectors in lavatories, child safety seat standards, fire protection reqirements for baggage compartments, medical equipment to be carried on board, improved ground and security crew training, tougher screening for both carry on and checked baggage on international flights, and stronger rules to prohibit and detect alcohol or drug use by crew members.

And as the Secretary announced January 21, we intend to issue new rules requiring random drug testing for those in sensitive safety and security positions in all transportation industries.

We are also working vigorously on new rules governing general aviation traffic in congested areas, airborne windshear warning devices, and the collision avoidance system known as TCAS.

Now, our national challenge with respect to aviation is to continue to keep pace in the government with the dynamic growth of the private sector.

To do this, the Reagan Administration proposal provides for steady increases in the level of air traffic controllers and safety inspectors, as well as for the expenditures needed for the national airspace system plan, the NAS Plan.

As you know, the NAS Plan will increase the overall reliability and capacity of the air navigation system, as well as improve our ability to address specific problems such as windshear detection.

While the number of people flying is increasing dramatically, existing air traffic control equipment is rapidly reaching capacity.

Also, we still have a lot of old tube type equipment in operation which, until it is replaced, requires ever higher maintenance expenditures.

Our proposal keeps the NAS Plan on target, with an increase in expenditures between fiscal year 1987 and 1988 alone of 68 percent, to $1.35 billion; and a further increase to $1.5 billion in fiscal year 1989.

We've made substantial progress in modernizing the air traffic control system as we replace obsolete and obsolescent equipment. Of the more than 90 projects in the NAS Plan, first deliveries have been made in about half of them, some 47 percent, and 14 percent are completed.

In the coming year, another 7 percent will be completed, and an additional 13 percent begun, for a total of 81 percent of all the projects either completed or with deliveries underway.

More specifically, in the next 2 years, we plan to award 36 contracts in NAS plan programs. Simultaneously, we will continue to install new equipment, such as computers, terminal radar, airport surface detection equipment, and communications equipment in over 750 locations. While we are modernizing the system, we will also be spending money on maintaining the large capital plant that is in place. One example, for which funds are included in the authorization proposal, is the replacement of the current rotating Tacan antennas, with high energy and maintenance characteristics, with much more energy efficient navigational devices that provide the same output.

Our bill also proposes a 6 percent increase in research and development authorizations from $141 million this year to $150 million in each of the next two fiscal years.

Airport congestion and flight delays have become a matter of increasing concern to the Department of Transportation as well as the travelling public.

While roughly two-thirds of delays are historically weather related, the remaining problems are not insoluble. We have already taken steps to provide some relief, including the recent partial implementation of the Expanded East Coast plan, and the issuance of the show cause order to permit the airlines at several congested airports to spread out their schedules somewhat at peak traffic hours.

These discussions, we believe, are already leading to better summer scheduling, and that's being done with no loss in competition.

To provide a more long-term solution, we propose, in addition to the NAS Plan's expansion of capacity of the airspace, that the airport grant program be restructured to permit more efficient use of grant funds.

Basically, we would reduce primary airport entitlements from 50 percent of the program to 35 percent, and increase funds for capacity enhancement.

Currently, fully one half of the one billion automatically goes by entitlement directly to approximately 280 primary airports.

If a sponsor's project is eligible, that is, if it falls within the statutory criteria for airport development and planning, it gets funded. It does not matter that the funds could be expended for a much better return at another airport.

By reducing the funds distributed on an entitlement basis, we propose to create a substantially larger discretionary program that is statutorily directed to the two most important national needs we face: congestion, and safety-security concerns.

And I want to emphasize that the new discretionary program is also statutorily directed right back to primary airports, now dubbed in our bill, "large commercial service airports", along with associated reliever airports and those growing airports that will achieve large commercial service within two years.

Even the major airports not receiving discretionary grants will benefit substantially from the increased efficiency in the whole system by virtue of the better targeting of these funds.

Moving briefly to state apportionments, we propose to recognize the dramatic growth in state government involvement in aviation. The 13.5 percent of airport grants currently apportioned to the states would increase to 22 percent, including for the first time a category totalling 5 percent of overall grant funds to be used for small commercial service airports.

Increased apportionment funding for the states will encourage voluntary state block programs. Simply put, states with strong aviation agencies which wish to guide small airport development will be permitted to do so, rather than continuing to rely on FAA administration of the small airport grants on a project-by-project basis.

The second major advantage of volunteering to administer a single state block grant is that many fewer "Federal strings" would attach to the grant money. As a foundation, we would provide that the block grant furnds: first, only be used for "airport development and planning" as they are now under a Federal project grant; that second, the project assurance for funded airports to be "available for public use on fair and reasonable terms and without unjust discrimination" apply in all cases, and that; third, the general Federal funding "match" of 90-percent apply overall to the block grant.

We're also proposing that any airport which wishes to forego federal grants may do so, and in turn, gain the authority to impose a passenger facility charge, a PFC, on travelers who use airport services.

We understand that the concept is controversial, and that the history of the PFC in the early 1970s led to the current Federal prohibition on these charges.

But the idea deserves, we believe, a new look, particularly on a voluntary basis.

An airport which can go it alone and wishes to do so should be able to. The only limitation on such PFCs would be that all proceeds be expended for airport-related purposes, while existing Federal requirements associated with past grants would remain in place, no new Federal requirements would be imposed at this time.

The legislation authorizes appropriations from the Airport and Airway Trust Fund for FAA operations up to a level that achieves an overall 85 percent recovery of FAA expenditures from the trust fund.

It remains the case that only about 15 percent of FAA services are provided to public and military aircraft operations. Other users can and should pay their share of costs for operating and maintaining the system.

Accordingly, the balance of funding should come from the user fees deposited in the trust fund for this purpose. The current balance in the trust fund exists because of two factors.

First, an unjustifiably lower proportion of the FAA's operational expenses have been authorized from the trust fund in the past. And I do not propose to reargue the equities of the trust fund share enacted in 1982.

But I do strongly assert the equity of having the aviation user fully fund 85 percent of the FAA from now on.

Second, over the last six years, the Congress has appropriated $943 million less than the Reagan Administration requested for the NAS Plan.

We believe it's time to correct both of these mistakes.

To conclude, I would like to point out why we think a two-year bill would be wise. Given the rapid change aviation is experiencing, a two-year authorization will provide an earlier opportunity to reassess and alter course as necessary.

The final Byrd Commission report, due in about 13 months, should be a major basis for that reassessment.

That concludes my prepared statement, Mr. Chairman. And again, I thank the committee for the chance to be here, and we're available to answer your questions.

Senator FORD. Thank you, Mr. Secretary. You left me wide open on a couple of those things, and I hope I can drive right through them.

We will proceed until we have to go vote.

Mr. Secretary, let us get into one of the major talking points around this building, that because of the huge surplus in the Trust Fund, several parties, and you began to listen to them this morning, one Democrat and one Republican, have proposed significant changes to the current situation, such as removing the Trust Fund from the unified federal budget, as well as imposing a trigger to cut off taxes if the surplus continues.

Would you support either of these efforts, if we cannot spend the money we now have?

Mr. BURNLEY. Well, sir, it should come as no surprise that the answer is an emphatic no, and I would like to elaborate on that.

Senator FORD. Yours is an emphatic no?

Mr. BURNLEY. We would not support either one of those. Let me clarify that, if I may.

To begin with, the balance in the Trust Fund, we believe, is real in the sense that it is in the Trust Fund account, but it is illusory in the sense that the funds have somehow accumulated while the federal government has not otherwise been called upon to expend exactly the same amount of funds, plus $2 billion, from general revenues.

So in other words, the reason you will have an unobligated balance of $5.6 billion by September is that the general taxpayers have been asked to subsidize the aviation users to the tune of $7.5 billion since 1982.

We do not propose to go back and recapture that $5.6 billion to repay the general fund. To the contrary, we propose in our two-year reauthorization bill to pull that balance down from $5.6 as of September 30 to about $4.3 billion.

We believe that the remaining balance should be further drawn down in the out years, that the Congress should come back two years hence and review where we are and make judgments on reauthorization, and that that is a much better way to go than trying either to take the Trust Fund out of the unified budget or proposing that we roll back the taxes.

One of our problems here is a timing problem, such as completing the NAS Plan. The NAS Plan has 100 different projects. They are extraordinarily complex, as Admiral Engen can elaborate on in a great deal of detail. We are not talking about state of the art in many of these projects. We are talking about beyond state of the art. We are talking about literally creating new technology in many of these projects.

As one would expect, we did not in 1982 predict it down to the penny or the month or the day when a given project will be successfully placed, and we do go back constantly and reassess. You, through oversight and in this reauthorization exercise, have a major role to play in that ongoing reassessment.

We find as we go through this that we are going to have some projects that are frankly going to take longer than the folks who did the 1982 version expected.

Now, those projects are going to cost money. Some of them are going to be extraordinarily expensive, as with the Advanced Automation System. Some of those expenses are expenses that the Congress has imposed upon us, and we think in many areas legitimately so, to do more testing before we make a final selection on a given contractor.

Nonetheless, those are real expenditures we are going to have to make, and we think that the balance that will be left—after our two-year reauthorization cycle draws it down to about $4.3—it is a balance we are going to need to draw down further to meet NAS Plan needs as well as to meet the other needs of the system, both on operations and on airport grants.

I will let Don, if I may, speak to the NAS Plan.

Admiral **Engen**. I would just add, Mr. Chairman, that the NAS Plan was designed to move through the period of development. We have reached now that point in time where we are about to receive all which we have asked for. Some 80 to 100 pieces of equipment are going to begin arriving this year each month.

We have now reached the point, where we are asking for this reauthorization, that we need those monies in order to insure the smooth flow of that production equipment into the NAS.

What Mr. Burnley said about the advanced automation system is absolutely true. It is state of the art technology using new language, and we are talking about 1.5 million lines of code which has never been done before in the United States. We view that in a positive vein. We know that we can get there, but we have to expect some delays as we move along.

The two-year reauthorization that we have proposed here does get us into that productive part of the NAS Plan which begins to bring those equipments to us. Now we need to install them.

Senator **Ford**. The Congressional Budget Office is going to testify later today that unless we do something, unless your prediction is right, the Trust Fund surplus will reach $16 billion in the next four years.

If the money in the Trust Fund is not spent, why should we continue to exercise the tax?

Mr. **Burnley**. Mr. Chairman, if we were going to have an unobligated balance of $16 billion, then I would be extremely concerned about that situation, but that is simply not the case. I have not seen their particular analysis but again, our proposal over the two-year cycle we are proposing for reauthorization would bring the unobligated balance down to approximately $4.3 billion and put us on a path of spending out the balances that have built up.

I continue, though, to politely but firmly suggest that the users who pay into that Trust Fund with the expectation that the funds will be expended to keep the system up to the needs of the users also ought to be covering the costs that are incurred by the United States Government as a result of their use. That is a fundamentally sound and fair concept.

If the Congress were to adopt that approach, that also would have a very substantial impact on the balance in the Trust Fund.

Senator **Ford**. You said earlier that only those who fly ought to pay. You also indicated to me that the flying public should pay their bill and that it should not come out of the General Revenue Fund.

Do you want to correct me?

Mr. **Burnley**. I said users, Mr. Chairman, and that would include, for example, people who use products that are shipped by air, through the 5 percent air freight tax.

Senator **Ford**. I say to you, Mr. Secretary, when an airplane lands on the runway, it does not know whether it has passengers or cargo on it.

Mr. **Burnley**. That is correct.

Senator FORD. There is a spinoff to the community by having a good air service. There is improvement in job opportunities, industrial development, et cetera, and those people benefit from that air service into that community that may not be basic users.

I do not see any reason why they should not pay some of this, because they do benefit from better air transportation and better facilities at the airport.

Mr. BURNLEY. Mr. Chairman, I believe that the way our financial structure for aviation needs works today, when you look at not just a federal level but the state and local level, it well does achieve that result to a substantial degree.

For example, today in terms of capital expenditures in our large airports, only about 10 percent of those capital needs are being met with federal funds. In other words, 90 percent of those funds are being generated at the local level and, through a variety of funding techniques that are being used by regional airport authorities and to a lesser extent state governments, you do have a contribution from the community at large.

Additionally, anyone who, as I said before, buys a product that is shipped on an aircraft does contribute to the Trust Fund and does pay a tax that is used for the benefit of the system.

Senator FORD. That is indirect and not direct, though, is it?

Mr. BURNLEY. Well, sir, it is indirect in the sense that you may not see it on the invoice, but it is very much a part of the cost of bringing the product to you, and you do see that show up.

Senator FORD. You make that purchaser out there understand that.

Mr. BURNLEY. It is very much the same argument that you have as to highways. In the highway system in this country, particularly the interstate system, we have pretty much agreed. We have had a consensus in this country for some years that the users of the system ought to be the source of the revenues to build and maintain our highways, and yet just as it is true of airports, the basic community at large benefits from a good highway system. It does have economic value.

So I do not think it is a radical concept to suggest that when you are talking about the federal role and where the revenues come from and how they are dispersed that the users of the system ought to be the folks who pay in the funds.

That is the way it is structured today, and the debate in this area is on whether those funds ought to be disbursed to cover all of the costs on the federal level that are resulting from the fact that we have to have a system to serve those users. We think that that is the way it should be done.

I would just point out, Mr. Chairman——

Senator FORD. Well, we may have the same situation in the airport reauthorization bill that we now have in the highway bill, too.

Mr. BURNLEY. I certainly hope not, in the sense that I would certainly hope that we would see both somewhat speedier action than we got on the highway program, since we have not been authorized to spend a dime out of the Highway Trust Fund since last October 1, and certainly I would hope that we could come to an agreement on these issues.

Senator **Ford**. Well, let me just say to you, if you think you are going to veto that bill and sustain it, and then get a bill right out of the committee, you are whistling Dixie. If that bill is vetoed you will not see another bill this year. That is the politics of the thing. I want to get a bill out of here that we can pass and will not be vetoed.

I also want a bill out of here that will do something for the airports and air safety in this country. Now, whatever it takes, I am going to try to do this. Ifyou want to recommend that it be vetoed, if you want 25 percent O&M this year, 75 percent O&M next year, you are doing exactly what they did to the tunnel going through the Cumberland Gap.

I am not going to be fooled by that on this one, and I want you to know that up front.

Mr. **Burnley**. Mr. Chairman, we were never under the illusion we could fool you in this or any other respect.

Senator **Ford**. Well, I just wanted to be sure that you are alerted to that and that your antenna is up on this one.

Senator Kassebaum, do you want to ask some questions before we vote?

Senator **Kassebaum**. Thank you, Mr. Chairman.

Mr. Burnley, I would like to ask about the administration's proposed elimination of the penalty provision, which ties the AIP funding to the trust fund support for FAA O&M.

Was this an oversight?

Mr. **Burnley**. No, ma'am.

Senator **Kassebaum**. What was your reasoning?

Mr. **Burnley**. Our reasoning was as follows, Senator Kassebaum.

After much debate, the Congress enacted and the President signed the 1982 act. That act says as a matter of policy we should have the users for the Trust Fund covering approximately 70 percent of all of the federal costs for aviation, including operations, the AIP program, the F&E account, the R&D account of the FAA.

With that penalty provision, as you know, that is not the way it has worked. In fact, unfortunately, only 57 percent of total FAA costs have been covered, despite that national policy that the administration and the Congress agreed upon that it ought to be at 70 percent.

We think that the number ought to be at 85 percent, and in fact recent studies that we have done indicate that the public-use part, the 15 percent part of the overall demand that creates the need for an air traffic control system and related facilities, is going to decline slowly down to the 12 to 11 percent range, so that the users, the private sector user portion, is actually going to be increasing as a percentage of the overall demands in the next few years, into the early 1990s.

So we are very, very concerned about any provision which puts us in a position of depressing the percentage of the overall cost of the system which is paid through the Trust Fund by the users. We think the Trust Fund was created for the purpose of funding these needs, and that is where the funds ought to come from.

I know that you have strong views in this area and that, on the other hand, you are thoughtful on these matters as well. Our hope would be that we could, during this reauthorization discussion with you, persuade you that the penalty kind of approach, as well as a tax rollback, presents substantial problems which we just do not want to recreate in the next reauthorization period.

Senator KASSEBAUM. I was fearful that perhaps you might have eliminated the penalty provision because the AIP funding levels would be so low that the penalty would be triggered.

Mr. BURNLEY. No, ma'am. We are not trying to depress AIP funding levels. We have made judgments, and I want to have Don Engen comment on those judgments, but we have made considered judgments about what the competing needs are that should be funded out of the Trust Fund.

Don, if you can elaborate.

Senator KASSEBAUM. Could I just make one other comment, please, because I am afraid that I am not going to be able to get back. I just want to compliment you on the block grant proposals in the legislation. I have long believed this was an important approach.

Are you locked to the specific criteria that you have established?

Mr. BURNLEY. Let me answer you this way, if I may. We will work with this subcommittee in looking at refinements to those criteria. One area where we have already conceded that it really would be perfectly proper in our judgment to add to the statutory list of criteria is in the "equal access" area. We have not included that in our statutory list and had planned to handle it through rulemaking, but we could easily live with statutory language.

There are other such refinements, and we would certainly work with you. This is our starting point in terms of the list of criteria, but no, I do not want to suggest that we are implacably opposed to any change in those. We do think the basic concept, though, is, as you say, a sound one and that we ought to recognize the remarkable growth in ability of many of our state governments in recent years in handling aviation problems and challenges.

Admiral ENGEN. I might add, Senator Kassebaum, that there are a number of states out there that have come to us and asked for this. I think that the state block grant program represents an innovative approach to what is a true national problem with respect to our airports.

I think we have to look out there to see how we can foster this cooperativeness between the states and the federal government in order to develop our airports. I am very pleased that some states have very good aviation departments, and they are very active in wanting to handle their funds. I look forward to working with those states because I think that is the strength of aviation.

Senator KASSEBAUM. Yes, I would share that, and I regret that we have to recess here temporarily. There are back-to-back votes.

Mr. BURNLEY. We will stick around.

Senator KASSEBAUM. Thank you very much.

[Recess.]

Senator FORD. The committee will come back to order.

Admiral, let me ask you a few questions. I believe you said that the air traffic control system has been virtually rebuilt and that you will meet the 15,000 total staffing level, as well as the requirement for 60 percent full performance level staffing at the high density facilities, as required by law, by September 30. Is that correct?

Admiral **Engen**. Basically, Mr. Chairman, it is, and I would just say one thing. We will never, ever have the air traffic system rebuilt in the sense that we come to the end.

The air traffic system is a living, dynamic system which must expand and contract with the air traffic. So you will see us continue to ask for additional controllers when needed and level off when not needed.

You mentioned meeting the goals as mandated by Congress. Yes, sir, we will meet the 15,000 air traffic controller work force goal. In fact, by June we should have that in hand. Yes, we will meet the 70 percent full performance level, controller level nationally. There will be about five en route air traffic centers, no terminals, which will be very close in our achieving that 60 percent goal.

Senator **Ford**. Admiral, there is increasing attention here on the Hill to the quality of airline service. It becomes a personal thing with some of the Senators and the Congressmen because they have missed airplanes or they have been rerouted or lost their dog or something like that. So there is increasing attention being paid to the delays.

How much of this problem has been accentuated by delays in implementation of the NAS Plan?

Admiral **Engen**. I would say virtually none. The NAS Plan is our step to the future. It is our plan, our goal, to meet the increased traffic demands that we know are going to occur. Traffic has compounded annually at some 7 percent. We are operating today at levels of 30 to 35 percent above what we were operating before the strike with virtually the same equipment we have.

We have the host computers going in. Some of them will be operational this year. We have other equipment going in which will help us stay ahead of this surge of traffic, but the NAS Plan itself and its implementation is betting on the future, and it has not created delays today.

Senator **Ford**. Mr. Secretary, the airport groups will testify in support of an annual AIP funding level of roughly $1.8 billion. If we were to authorize this amount for the Airport Improvement Program, is there a chance we could get the administation's support?

Mr. **Burnley**. Senator, regretfully I do not think so, but I do think that the committee has the opportunity to provide additional financial resources without threatening the resources we need for things like operations and the NAS Plan. We have suggested some alternatives there on which we would like to work with you.

The most important one, I think, is the voluntary defederalization opportunity. We think that by freeing up the largest airports that you could address that issue in a very, very substantial way. I have been pleasantly surprised. A number of medium-sized airport operators have said to the Department, including me, personally, that they would jump at the opportunity if it were given to them by the Congress to opt out.

That, in turn, of course means you have more resources for the balance of the system. It has to be federally funded. There have been other numbers bandied about for airport grants, but the over $2 billion a year we think is really excessive in terms of the competing needs, not of the federal budget outside of aviation, but the competing needs of aviation at the federal level. We really do think that it is important that we have the funds there in the Aviation Trust Fund for the NAS Plan.

If I could use this to comment on your question to Admiral Engen as well and his answer, what has happened to us is, with the short funding of the administration request, not to mention what you authorized on NAS Plan and our Facilities and Equipment account over the last six years, we and the FAA have had to do some fancy footwork. We have had to do some things like slipping the obligation of funds from August-September over to October-November, that kind of thing, to make sure that these funding shortfalls on F&E did not slow down the NAS Plan in any significant way.

Today, I think Admiral Engen and I would agree we have pulled that off, but we cannot do it anymore. We are at the end of the opportunity for footwork, and that is why we have come to the Congress and asked that in 1988 and 1989 we have these massive increases in F&E funding.

So I really think it is important as the Committee looks at the reauthorization bill to sit down and not only look at the needs of airports but also look at the variety of the ways those needs can be met and also keep a very close eye on the other competing needs of aviation that you want to fund out of the Trust Fund. I think you will find that the $1.8 number really is on the high side.

Senator FORD. The administration bill, as you well know, significantly increases the Trust Fund share for FAA operational expenses, but there is no increase in AIP funding. Why should we increase O&M without increasing AIP?

Admiral ENGEN. Mr. Chairman, may I?

Senator FORD. Yes, sir.

Admiral ENGEN. In the F&E account in the first year of our reauthorization request, we have increased the facilities and equipment budget request by some 64 percent. This is to buy the new equipment that is coming in.

On the matter of operation, I would like to respectfully say that the operation of the system really provides safety in the system. We spent 45 percent of our O&M budget for air traffic control salaries. We spent 20 percent for maintenance of air traffic control facilities, the salaries of those people who maintain the navigation facilities. Of course, we have leased telecom costs and aviation safety inspectors out there which counts for another 18 percent.

So those people are used to provide the safety of the people who use the system. I view that as integral to the FAA's operation and, being the administrator, see that as giving me the flexibility to improve the safety of the system.

Senator FORD. Well, I think it raises a question in the minds, at least of this Senator, of those who have to look at the reauthorization bill. When you go from 25 percent to 75 percent, that is a pretty good increase. It indicates that you are going to use Trust Fund money for what has been general fund money.

This is typical of the administration in the last five years. You do not spend the Trust Fund money where it is supposed to go, but you move it into other areas and move it off the general fund.

Now, I know that can be refuted, and I see Mr. Burnley frowning. It looks like furroughs in a tobacco field in his brow. Nevertheless, that is my opinion, and it is going to be very difficult to change it.

Mr. BURNLEY. Senator, if I could just ask——

Senator FORD. You can ask me anything you want to, but I refuse to answer sometimes.

Mr. BURNLEY. I would just ask you to consider that the Congress in 1982 did agree with the administration on a 70 percent recovery of all FAA-related costs number, and I am including in that all the accounts that are administered by the FAA.

I would hope that in thinking about these percentages and what comes out of what pot of money that we do not lose sight of that. What has happened to us, though is, as we talked about before you folks had to go vote, with the penalty provision we have fallen way shy of the 70 percent.

The 85 percent proposal is hardly a radical proposal, and we do think that the Congress was getting in the right neighborhood back in 1982. We would just like to have you come a little closer to the full cost recovery.

Senator FORD. Well, I do not want to dispute your testimony, but I thought the legislation authorized 50 percent FAA in 1982.

Mr. BURNLEY. Senator, the 70 percent number and the 85 percent number are both calculations based upon all of the funds that are disbursed through the FAA, including AIP and all of our other accounts, R&D, F&E and Ops. So that when I say 70 percent, that is the overall number I am talking about, and included in that is this 25 to 75 percent upward move on operations.

Again, I think it is important to keep in mind the Congress did approve in 1982 of trying to achieve a very substantial recovery.

Senator FORD. I have just a couple more questions, and I will turn it over to my colleagues.

You have asked for a two-year reauthorization. You indicate in your opening statement that the Byrd Commission would be completing its report in 13 months. Well, that is well past a year, you know. How strong are you on the two-year reauthorization? How much fuss would you make if it went to three or five?

Mr. BURNLEY. Senator, we would not fuss. On the other hand, we think two years makes sense from a lot of perspectives. The Byrd Commission and its input is one. As you know, on March 12 the President did announce six of seven members.

Senator FORD. Have they met yet?

Mr. BURNLEY. Not that I am aware, Senator. I would hope that on the seventh member that the FBI background check that is necessary on every presidential appointee could be done quickly.

But the Commission had, under your legislation, a nine-month reporting goal and an 18-month reporting goal. We do think that that Commission, when it is up and running, can make valuable contributions and that two years out, in the spring of 1989, that they would certainly have had a lot to say by that time.

That is not the only reason, though, that we are recommending——

Senator FORD. My inclination is to go further than the two years, and I will put you on notice of that now.

Mr. BURNLEY. If I could just comment, one additional point. Aviation in this country, and I think we would all agree, is in a period of very rapid change. The needs that we face today are different both in quantity and in mix from the needs that all of us would have projected, say, back in 1982 when you last went through this exercise.

Given how rapidly it is changing, we think that that is a pretty compelling argument for looking at a shorter reauthorization period, because it gives the Congress the opportunity to review what has happened and to make whatever adjustments it deems appropriate at an earlier date than you get if you go four or five years out.

Senator FORD. Mr. Burnley, as long as we just sit back and wait, and wait until we get this Commission's report, and wait until we get to do that, we will be waiting so long that we will ground them because we will not be able to talk to anybody up in the air. Our equipment will be too antiquated. I think we have to move a little bit faster.

Mr. BURNLEY. I agree with that, Senator.

Senator FORD. Good. We have arrived at some agreement this morning.

Mr. Burnley, I want to ask you one other question, and then I will turn it over to my colleagues.

You are asking for a larger amount of discretionary funds. Now, it is my understanding that the Secretary depleted the discretionary funds last year and in fact overcommitted those.

Mr. BURNLEY. I do not believe we have overcommitted. I will defer to the Administrator on that, but that is news to me if it happened.

Senator FORD. But you did commit them all?

Mr. BURNLEY. Yes, sir, we sure did.

Senator FORD. Yet, you want more. I guess that will be significant next year.

Mr. BURNLEY. Well, sir, it is not because we think that discretionary funds in the abstract are better than formula funds. That is not the point at all.

What we face today, though, with half of all the funds that go through AIP locked in by formula is a very limited ability for the FAA to make judgments about competing needs. We are just suggesting that——

Senator FORD. Does the Secretary ultimately make that judgment?

Mr. BURNLEY. In the real world, Senator, the answer is that that process works its way up through the FAA, and very, very seldom does the Office of the Secretary get into grant specific discussions. It does happen from time to time in particular cases, but it is not a common occurrence.

Senator FORD. If the Secretary does not want to authorize it, then it is not authorized. Is that correct?

Mr. BURNLEY. That is right.

Senator FORD. Okay, so ultimately the choice is the Secretary's.

Mr. BURNLEY. It is, and, again, the discretion that we are asking the Congress to give us is the discretion that permits the process that begins in field offices of the FAA to make informed judgments—about when you have two competing airports, you have a limited number of dollars, and one airport is proposing noise-related projects and the other airport wants to add a runway— that they be given somewhat more flexibility in judging where you get overall capacity enhancement for the dollar.

Admiral ENGEN. Mr. Chairman, we look at two basic things, safety and capacity, for discretionary funds.

Senator FORD. Well, Mr. Secretary, this is my final question.

As you well know, I am very interested in the future of the contract tower program for the smaller airports. Senator Hollings and I have written to Secretary Dole on this and have yet to get a response.

Can you tell us today for the record what the Department's plans are for this program? Will it be continued on a long-term basis?

Mr. BURNLEY. Senator, I apologize our tardiness in getting a response. When you get it, I think I can predict with a lot of confidence that it will be a very positive response and that it will include a set of formal written policies that have been worked out with the FAA leadership to continue this program in the long term.

Senator FORD. Mr. Secretary, that is music to my ears.

Senator McCain.

Senator McCAIN. Thank you, Mr. Chairman. I would like words of praise for the outstanding job that Admiral Engen has done as the administrator of the FAA. He has served this Nation in several capacities, all with distinction. Admiral, I can assure you you will be missed, and you are much appreciated for your stewardship in this very difficult period in the history of your agency.

Admiral ENGEN. Thank you deeply, Senator.

Senator McCAIN. Admiral, as you know I do not mean to sound too parochial, but I am still concerned about the situation in the Grand Canyon. I know that recently a temporary rule was signed. Basically, my understanding of it is that general aviation and transcient aircraft are prohibited to fly below 9,000 MSL, but it does not in any way affect the air tours.

I know it is a temporary rule. I would like perhaps to see action taken before you leave on that, since I know you are familiar with it, and I would hope that we would insure that whatever rule you issue will prevent reoccurrence of the tragic midair collision that took place a couple of years ago and the 10 serious accidents and associated fatalities that have taken place below the rim of the Grand Canyon in the last 10 years.

Admiral ENGEN. Senator, I share your great concern, and it is mine as well. In that rule is the provision that there be standard flight patterns for those tour operators who operate in there, and our goal is to separate those aircraft. I know exactly what you mean.

I might add that we do not intend to prohibit general aviation aircraft but we may require, for example, that they have a briefing so that they will abide by the set standards and also the flow patterns that we have above the Canyon rim.

Senator McCAIN. Thank you.

I would like to return for a moment to the dead horse that has been kicked around pretty well today, and that is the subject of flight delays. The claim is made by the airlines that one of the reasons why the flight delays have increased dramatically is because that there are not sufficient ground facilities, gates to park, et cetera.

Yet, when I see that schedules at major airports during peak hours require double and in some cases triple the number of landings and/or takeoffs than the runways can handle, it obviously is a built-in delay no matter what the weather and no matter what airlines' protestations are to the contrary.

I was encouraged a few weeks ago to read that the Secretary of Transportation and yourself were going to engage in negotiations concerning landing and takeoff schedules at 12 airports, and I heard it squeezed down to a smaller number. Now it is down to two airports, at least from what I read in the media.

Is that really what we want to do? Do we not want to discuss all airports where this unacceptable situation prevails as opposed to just two?

Admiral **ENGEN**. Absolutely. It is a national problem, Senator.

Let me say the reason that was whittled down is that there were changes, in St. Louis for instance, with the merger between Ozark and TWA that brought about some very basic changes that made St. Louis less susceptible to overscheduling. There were changes at Newark much in the same vein when People's and Continental, Texas Air, merged.

We came down to three airports which were Chicago O'Hare, Dallas-Fort Worth and Atlanta Hartsfield. As you know, two weeks ago we met with the airlines all week long, and we are continuing negotiations at this time to ameliorate the schedules at those airports. We are meeting a modicum of success.

We had some very graphic changes in our delay picture when we had a successful meeting in 1984, and as a result 1985 showed a dramatic decrease in the number of delays.

I am very concerned about the summer, and I am not sanguine that we have yet made the changes necessary to improve the summer schedule. We are continuing to work towards the deadline date, which is April 13, when the official airline guide will be published and the schedules will be firm.

Mr. **BURNLEY**. If I might add, Senator, the discussions and the preliminary work done by the airlines leading up to the discussions did result in over 300 changes, and the Admiral correctly points out that we had success in places like St. Louis. Philadelphia is another example, I think, where the airlines came in and addressed the problem substantially before they sat down at the table.

That process is not viewed by the Secretary, and as the Administrator indicated not by him either, as a panacea. It is one of a long litany of things that we are doing right now to try to address the delay problem. As you know, something called the East Coast Plan was largely implemented last month. Additional steps which Don can describe in detail will be put into place this fall.

Don and his people are working on a counterpart called the West Coast Plan that will be some months down the road after the East Coast Plan is fully implemented.

The short-term results of that East Coast Plan have been rather dramatic, and it is much too early to claim complete unmitigated success, but, nonetheless, the early numbers are quite good

Additionally, Don and his people are working daily with the airline scheduling folks in a way that is really new and different for all of us, and just that exchange of information, the FAA making its technical data base available to the airlines in a very substantial way, we hope will pay dividends over time.

Now, on top of that, through the Office of the Secretary, we have a couple of other exercises under way that are important to mention because we are investigating scheduling practices. We started at Atlanta Hartsfield. The Secretary does intend to go through the other 12 of the 13 largest airports.

We have an affirmative statutory obligation, if we discover what we believe to be deceptive scheduling practices, where you have airlines putting out a schedule they know they will never meet or most of the time will not meet, to consider remedial action. The Secretary is quite determined to take that step should the record indicate that that is happening.

On the other hand, we would much prefer, frankly, to find that an airline, whatever its sins in the past might have been, has corrected the problem so that we can praise them for having corrected the problem.

There are airlines that have a good record in the recent past as well as the long term of correcting their schedules periodically to match reality so that they do not create a perception problem with you or me as to what time that airplane is likely to get to where you want to go. Piedmont is a standout example in that regard.

So there are a variety of steps that we are taking and that the airlines are taking to address this problem in addition to the antitrust immunity meetings. When all is said and done, however, it is important, I think, for us to continue to point out that we cannot fix more than about 30 percent of this problem if we fix everything we can fix and if the airlines do everything they can, because most of the rest of the delay problem is weather. We can certainly do a great many things on that 30 percent plus.

Senator McCain. What is the other 70 percent?

Mr. Burnley. The other 70 percent?

Senator McCain. Yes, you said——

Mr. Burnley. It is weather related, year in and year out.

Admiral Engen. If you take 100 delays, 65 of them will be due to weather and then maybe 20 will be due to scheduling, and the rest are attributable to the system, the lack of concrete and macadam upon which to land.

Senator McCain. I am not sure that that 30 percent is a fixed percentage because I think the numbers indicate the delays have been increasing at a rather steady rate.

Mr. Burnley. Let me just correct that, if I may. The delay problem got acutely worse in 1986, but as Admiral Engen pointed out a little bit ago it improved dramatically in 1985 over 1984, after we had the 1984 discussions.

There is no question, last year we saw a 25 percent increase over 1985, so that is one reason we have asked the airlines back to the table, because we know there are some things we can do. I would hope that sometime later this year we will be able to come back and say to you that the 1986 problem has not become a trend in 1987.

Senator **McCain**. Well, let me just say that most of us think that in terms of the effects of airline deregulation, that the benefits far outweigh the difficulties.

I also would suggest that there are regulations and laws on the books. You mentioned one of them, deceptive scheduling practices. I think tomorrow I could go out and look at a schedule as well as you can and find airlines that have engaged in that kind of activity.

Perhaps it is time that we brought the hammer down on some of them, which might send a message throughout the industry to stop this practice. At least it would cause the problem to diminish, I think, rather significantly, and I hope you will consider enforcement similar to that Admiral Engen, I think very aptly and in an excellent fashion, pursued in the area of aircraft maintenance violations. I think that has had a real impact on a lot of other airlines besides those that were fined for not being in compliance with the regulations.

Let me just also, if I could, ask you about Senator Chiles' proposals.

Did you find some of the things he had to say worthy of serious consideration by this committee?

Mr. **Burnley**. Yes. I would like to caveat that, however, by saying we do have some concerns about the land bank approach. He is absolutely correct that buying land before you absolutely need it is a wise policy in many locales. It is particularly important, given how intensely the opposition to airport expansion seems to be in a lot of communities today because of the noise problems.

To the extent that you have bought land to buffer you in the early years, you are way ahead of the problem. Our concern with the land-bank, revolving-fund approach is that we do fear that will create a dynamic that puts a lot of pressure on local airports to utilize that part of what is available to them, whereas if it was not dedicated just to that activity, their own planning devices might cause them to come to us for grants in other areas and seek somewhat less land.

It is the artificiality of the pressure you put on a particular airport operator to put "X percentage" of its grant applications before us on the land acquisition side that concerns us.

Admiral **Engen**. Let me put a nuance on that if I can, please. I think what we don't want to do is drive those people to the land banking dollars, as Mr. Burnley says, absolutely not. And we want to be sure that that's not how the fund is used.

Purely and simply, our problem today is that we don't have enough runways upon which to land, and we need, in some very key places in these United States, to focus and make the community aware of the need to build future airports. For instance, Chicago.

I don't think Mr. Burnley meant no land banking for developing a new airport, and I would just like to emphasize that that part of Mr. Chiles' proposal has great promise for individual sites of airports. But taken nationally, we wouldn't want to have every airport banking land.

Senator McCain. Mr. Chairman, if I could just finish this line of questioning, was there anything else that Senator Chiles proposed that you think is worthy of support?

Admiral Engen. I would support his views on the towers. I have flown in Florida, as I know you have, Senator. It is a concern to all of us. I think that anything we can do, through whatever avenues, to put licensing requirements on those who build towers or obstructions, we should do so. I think that is important.

Senator Chiles did mention that he had 85 near mid-air collisions in his state last year, and I would say to this committee that that follows with the numbers of airplanes that are in Florida because Florida, Texas, Illinois, California are where the majority of the general aviation airplanes are based. That is where we find the majority of the near mid-air collisions and they are generally between general aviation aircraft.

So Senator Chiles' points about the towers were good, I think. I would disagree with Senator Chiles with respect to his operations funding, the O&M, because as I explained to the Chairman, I firmly believe that the air traffic controller and the safety inspector who performs his duties or her duties, is doing so for that person who flies in the system out there, and I would seek a larger apportionment for O&M.

Senator McCain. Thank you, Mr. Chairman.

Senator Ford. Thank you, Senator.

Senator Danforth, welcome.

Senator Danforth. Mr. Chairman, thank you very much.

Admiral, let me begin by saying what others have said. You are highly respected in Congress and your departure is regretted by many of us. I want to join others in expressing my appreciation for the service you have given to the government, to the country.

Admiral Engen. Thank you, Senator, very much. I have served with deep honor and commitment to my country, and I appreciate that.

Senator Danforth. I think that, getting on to the matter before us, I think that the system is clearly overloaded. Admiral, you have pointed out the need for runways, for improvements, for facilities capable of handling the greater load. It seems to me to be obvious, and that is why I think we should be much more aggressive in using the Trust Fund for the purpose of building runways, improving runways, providing equipment and so on that we are going to need in the future.

I have introduced a bill to that effect. It is a pretty aggressive bill. I have also spoken with Senator Ford about this matter and he may not agree with every number in the bill that I have introduced, but I know that he and I share a common view of the needs for the future.

I just state that, not to continue to beat the dead horse this morning, but to state it.

I want to go on to another question and direct your attention at it. I know that the Administration has been holding negotiations with the airlines in the last week on the issues of overscheduling. Apparently, and all I know is what I read in the paper, but apparently those negotiations have been something less than totally satisfactory. I think most of us don't want to revert to a regulated atmosphere. We don't want the government to be instructing airlines as to what flight takes off at what minute from what airport. We don't now purport to tell the airlines that. There is nothing, as I understand it, in the existing law, that would put the Department of Transportation into the business of drawing up plans for each airline and for each airport as to what plane takes off and when it takes off.

Therefore, a suggestion that I have put forth is simply a disclosure suggestion. That is, to develop a mechanism for informing the public as to the likelihood that their plane will arrive on time and what the average delay has been.

Back in the days when I was a state attorney general trying to operate a consumer protection division, I felt that at that time that the best kind of regulation was not detailed regulation by some agency, but rather putting the information out and letting consumers make their informed judgments. I still believe that.

It seems to me that a lot would be gained by putting the airlines in the business of competing with each other, not simply on the basis of fares, but also on the basis of service.

Now when I call up TWA and say, what is the flight schedule for St. Louis tomorrow, they will tell me that and they will also tell me how much I have to pay. If there were more than one airline flying into Lambert, I could ask that airline as well. And there would be competition on the basis of price, on the basis of alleged time schedule.

But basically, I would contend that deregulation has become almost all price competition and very little competition on the basis of any standard other than price. Therefore, much would be gained by providing the possibility for competition on the basis of reliability of service and true scheduling.

Now if you absolutely have to be in St. Louis or Louisville at, say, 11 o'clock in the morning, you really have to start tonight. You really do. A few weeks ago I absolutely had to be in St. Louis at 4 o'clock on a Friday afternoon, absolutely had to be to be at a funeral, couldn't miss it. I could have left at noon. There was a flight that left at noon, 12:10, something like that. I didn't take it because it was not, to me, reliable. So I left at 9 o'clock or so in the morning to allow myself plenty of time to get to my destination on time.

It seems to me that when the customer calls up the airline or the travel agent, the customer should be informed as a matter of course: one, the price, and two, the likelihood that the plane is going to be on time. That would be really simply information to provide. Surely, we have the technology to gather information about delays and to pass the information on.

Am I all wet, or is there something to be said for this approach?

Mr. **Burnley**. Semi-wet. Not all wet, Senator.

Senator **Danforth**. You have been telling me I am all wet in the nicest possible way for how many years now?

Mr. **Burnley**. Certainly, Senator, even though this is an aviation hearing, I cannot let this momentous day go by without saying you were absolutely dry in all respects on your brilliance on the Conrail issue.

In any event, back to airplanes.

Senator **Ford**. There are others here.

Mr. **Burnley**. With all due respect to the Chair, I will limit my comments to what I said.

Let me answer you this way. Secretary Dole and I share your view that that is an important obligation that the airlines have to their customers, to be honest in dealing with customers about when the airplane is going to get you where you want to go.

The place where we have concerns is in what mechanism is to be used. While in this day and age of high tech and computers, it may be relatively simpler than it once was to gather that information, nonetheless the complexities of making that system work, from a Federal enforcement perspective—we would have to be the enforcers—really are quite daunting. You think about the fact, and I don't have the number at my fingertips, but I think we have something in excess of 200,000 travel agents in this country, if I'm correct, or maybe that is agencies, not counting employees.

Now what you are talking about us doing is policing every phone call to every one of those people as to what information——

Senator **Danforth**. No, that is totally ridiculous. If I were advocating reregulation, if I were advocating your utilizing whatever authority you have now in the law on a systematic basis to insist that fraud not take place, that would be providing an onerous burden. But all I am suggesting is a simple requirement that the public would know about—I mean, the traveling public, when they call up, the word is going to get out that you have a right to know when the plane will really land or the likelihood that it is going to land on time.

This is something that doesn't take a lot of action by DOT to police. The public is going to police it. Just provide a mechanism for them finding out.

Mr. **Burnley**. I am reassured to hear that we wouldn't have to in fact police each such transaction. I am not sure how we would satisfy your legitimate concerns, however, if we had people calling us and saying, well, I just called travel agency ABC and they didn't tell me, so what are you going to do about it? That is the problem that we are not sure we know enough to solve.

Let me take it a step further, if I may. We believe that we have today on the books the legal authority under Section 411 to go after folks who deal deceptively with their customers. That is why the Secretary has opened the investigation on deceptive practices with respect to the information that they put out. Because whether or not it is given to you over the phone when you call a travel agent or call the airlines, however the consumer gets the information, nonetheless, airlines today tell you on every single flight one way or another, because you have to know, what the expected time of departure and the expected time of arrival are. You get that information.

The question that you are asking us to address is reliability, and we think under 411, if systematically an airline is engaging in the practice of scheduling a flight and telling the public what is not true, we can do something about that under existing authority.

Senator **Danforth**. I would respectfully say to you that proving deception is much more difficult and places a much greater burden on the Department of Transportation than a simple requirement that airlines provide the customer with information as to what has happened in the last month. It doesn't take any policing. You don't have to run around with hundreds of inspectors from DOT and police travel agents. I would suggest to you that you don't even have to have a penalty system.

Mr. **Burnley**. We simply announce that this is required?

Senator **Danforth**. You simply announce that that is what they do and the public is going to ask the questions. I really believe that. You might have in an egregious case a penalty system. I don't know. The situation is comparable to consumer fraud cases—when I was state attorney general, I couldn't bring cases against every alleged fraud. I couldn't do it. There was no way that I would have had the thousands of lawyers on my staff that would be required to do it.

So what do you do? You bring a handful of cases that are very visible, and beyond that you rely on consumer disclosure. That is all I am talking about. It is basically a right to know, and the public would insist on it. There could be at least a modicum of policing, I would guess, where every now and then somebody at the Transportation Department would call an airline and find out what they are saying and know whether it was true or not. That wouldn't take much. But I honestly don't understand the reason for opposing it. And I would hope that you are not making a firm opposition to it now. I would hope that the Department would be willing to work on a sound, reasonable approach to this.

Mr. **Burnley**. Senator, if all that you are asking of us is to join with the Congress in exhortatory language to the airlines to disclose this information, that does put it in a vastly different light. And if you are contemplating——

Senator **Danforth**. I am not just saying exhort them. I am saying it is required, and maybe if there is a pattern of abuse or something, you have ten people in your department or three people in your department who make calls and just find out if airlines are telling the truth or not every now and then. That is what I am talking about. But basically just to give the public the information.

Mr. **Burnley**. Well again, I don't mean to make too much of this because I would do so at my peril—I might be back here a few months hence explaining why it didn't happen this way, but we are in the midst of the Atlanta Section 411-related exercise. We are doing that both to learn about things, but also the Secretary has every intention to act if we find patterns of deception. I would politely disagree, based upon the very preliminary data we have as to whether it is possible to do that. We think it may be possible.

If you could, bear with us long enough to complete the Hartsfield investigation and see how we handle that and whether the information that we make available to the public about what is going on there has just the impact that you desire. We do not yet have enough information to know whether we can go forward with an enforcement proceeding. We are in fact looking at the information right now.

But I can reassure you to this extent, that the Secretary has said repeatedly, in the confines of her office as well as publicly, that if we have got documentation of an airline which systematically misleads people about when the plane is going to take off and when it is going to land, and they know that that is happening, and we are getting this data from them, so there won't be any question that they know it is happening, then she is going to do something about that. And we think under existing statutory authority, we can.

Senator DANFORTH. Mr. Chairman, you have been very generous with the time. I wonder if Admiral Engen could give his comments on this subject.

Senator FORD. Before you do that, let me ask a question of you. Should TWA be required to say we have a flight leaving here at 1:02 and it has averaged 84 percent being on time. Its delays have been 16 percent because of weather. We also have a flight that leaves out of here at 2:06. It has a 92 percent arriving on time and 8 percent due to mechanical breakdown. We have them leaving here at 3:04——

Now I am very serious about this. Is that what you are requiring that operator to give to me when I call? Yes or no.

Senator DANFORTH. Yes.

Senator FORD. Okay.

Senator DANFORTH. Can I tell you how I think he or she should answer the phone?

Senator FORD. Why sure. "Good afternoon. TWA."

Do you want to get upset with me for having fun?

Senator DANFORTH. Heck, no. The way I would answer it would be simply to say that flight 123 is scheduled to leave at 9:00 a.m. and to arrive at 11:00. In the past month it has been canceled three times and it has been delayed five times and the average delay has been a half an hour. To me, that is something that takes ten seconds to state.

Now you compare the time that that takes to state. "The plane has been, in the past month, delayed five times, seven times, whatever, and the average delay has been 40 minutes and it has been canceled three times." Compare however onerous that is, ten seconds, with the total aggravation of the traveling public today.

My family has created a word to describe it. It is a verb, "to tarmac". The meaning is to pull out from the gate and sit there. You go to the airport now and you can almost be assured, half the time it seems, you are going to tarmac.

Senator FORD. I don't have the same kind of problem.

Senator DANFORTH. I think that to at least give people reasonable warning so that they don't break their necks going out to the airport and sit there on a plane for 1 hour is reasonable, and it seems to me that it really, really is not burdensome to anybody to ask them to tell the truth.

Senator FORD. What about using that in advertising, rather than requiring it by the operator who answers the phone?

Senator DANFORTH. I am willing to discuss anything. All I want is a simple disclosure mechanism so that people are told the truth. They are told something when they call up. They are told something. They are told the price. In fact, when they are told the price, usually they are told the price forever. If you will buy a Supersaver you will get such and such and the requirements of the Supersaver are that you cannot cancel, and on and on and on. That is not viewed as being onerous by anybody, to give myriad options for how you can get from Washington to Louisville or San Francisco or some place. They go on and on with a whole list of alternative pricing schemes so that they can be competitive.

Why not, in addition to that, just tell the truth about the time of arrival?

Senator **Ford**. You know, your experience and mine have been somewhat different. When I call up, they don't go into all these excursions and Supersavers and that sort of thing with me. I ask them what time the flight—usually I know what flight I want to take, like you do. And when you call and ask for a reservation on that flight, basically you ask if it is supposed to be on time. They can either tell you yes or no at that time. I get that answer.

I am trying not to put an additional burden on them. I understand where you are coming from, but I am trying not to put an additional burden on the airlines. I am also trying to work out something so that if you want that information, you don't have to call the airlines to get it, that it is somewhere that is available to a consumer, or when they pick up their tickets, for example, on the back of the envelope.

Senator **Danforth**. Admiral, do you have any thoughts on this?

Admiral **Engen**. Yes, sir. I do. Every day that goes by, by 8:00 in the morning, I have immersed myself in the numbers of delays the day before. I have looked at this for three years now on a daily basis and I wouldn't want to paint the airlines all black. I think that there are many reasons for delays, but one of the prime reasons is scheduling, the other being weather, and there is some air traffic delay in the system, particularly at the crowded airports, but that comes back to scheduling again.

I would just say, sir, that we are dealing with quality of service with the airlines. I believe that there is available today the technical knowhow to report on-time performance of an airline. That should be a company requirement, not a government requirement. The company itself could announce its on-time performance for the previous month or two weeks or whatever. It doesn't have to be specific and in percentages and things like that, but I think in some general form it could be announced which would go along with truth in advertising, which I think would be very salutory.

I believe that we need to address delays across the board, though. I deal, as an operator, in safety and trying to improve the air traffic system, and I want to sit before you here and say that I and others are doing the very best we can in the FAA to improve the delay situation. We have come to a point where there are some parts of the United States where there just are not enough runways available, and we need, in the long term, to get those communities to try to develop those airports.

The FAA doesn't go out and say, put an airport here or put an airport there. The community should come in with its plan to put that airport there. Now there are some very good plans out there, but the community must come to the federal government seeking matching funds, or whatever, to develop that airport. That is the long term fix. And in the meantime, we in the FAA should publish our delay figures. I would like to see the airlines publish their on-time performance.

Senator **Danforth**. Would that be a simple matter to do?

Admiral **Engen**. The information is available today.

Senator DANFORTH. And it will be very simple to provide it to the public?

Admiral ENGEN. Well, it is proprietary information. It is not required. You know, each airline does it in real time. Mr. Burnley mentioned Piedmont a litte while ago. They have done a very good job of meeting their on-time performance because it is a very basic decision that they took, wanting to improve the quality of their on-time performance. Each airline measures what its on-time performance is. They know it. They just do not publish it.

Senator DANFORTH. Thank you.

Senator FORD. This gets back to what I suggested about publishing. Now, there is a difference between publishing and that operator laying that out every time you call for various and sundry requests for flights. It would be especially burdensome when you add in connecting flights. For example, you may have two stops in the morning, and then in the afternoon you only have one stop. So you begin to call and get all of that. Each one of those would have to be given this information, but Admiral, you said publishing. You used that word several times on your statement to Senator Danforth. Are we at a point where you think it can be published, and maybe Senator Danforth is looking at that requirement when you call the airport.

Admiral ENGEN. I am really dealing in Mr. Burnley's bailiwick here, because that function rests with the department, because it came from the CAB.

Mr. BURNLEY. Let me answer you if I may this way, Mr. Chairman. Admiral Engen noted that companies have the information and can do this today. And as I said in answering Senator Danforth earlier, we have enforcement authority today on deceptive practices. Before the Congress tries to sit down and craft legislation that is permanent law that defines what period of time the airline has to go back and cover, what do they have to say about why the delay occurred, what our policing function is in making sure they do all of this honestly, I would hope that we would give the industry a little more time and us more time in two areas. One, it seem to me there is a real marketing advantage right now to an airline that does that voluntarily. They can probably sell more tickets if they are being honest with their passengers in their advertising. The other thing is, we are not just sitting there. We do have a very active investigation. Now, while this data exists one thing that we have learned the hard way is that it exists like this. When you stack the computer printouts up and you are looking at a lot of flights you have got a real information management problem here regardless of who is trying to deal with it, but we, nonetheless, are going through that information very vigorously right now as to Atlanta Hartsfield, and again, I cannot overemphasize Secretary Dole's intentions in this regard. As soon as that is completed, and it is not going to take us very much longer, we have got in hand data that we have got a flight 70, 80 percent of the time, whatever it may be, does not show up at the published arrival time. She, while reserving judgment for now about what she is going to do, she intends to address that directly. And as Senator Danforth noted earlier, perhaps one or two examples where we do take action, and again, one of the things that she will have to decide is what within the range of available actions under existing law she wishes to take, will suffice to get this problem addressed very, very directly by those carriers that today do not treat it seriously.

And the industry, as I think your comments indicate does cover a spectrum in this regard. We have got some people who are doing a pretty good job of being honest with the customers right now. We have got some other folks who really do not pay a lot of attention to that.

Senator FORD. Admiral, do I take it that if Piedmont would publish their on time performance they would look better than most airlines?

Admiral ENGEN. When I looked 3 weeks ago that was true. I was impressed by what they had been able to do.

Senator FORD. I have no further questions. Do you have any more?

Senator DANFORTH. No, thank you.

Senator FORD. Thank you. There may be some questions in writing. We hope that you will answer those expeditiously.

We have one more witness, and that is Edward Gramlich, Acting Director, Congressional Budget Office. Ned, you may proceed. If you want to just put your statement in the record we will accept it.

STATEMENT OF EDWARD GRAMLICH, ACTING DIRECTOR, CONGRESSIONAL BUDGET OFFICE, ACCOMPANIED BY MARK DAYTON, ANALYST

Mr. GRAMLICH. Thank you for giving us the chance to appear before the subcommittee, Mr. Chairman. My statement covers 15 pages, and it would obviously be inappropriate to read the whole thing at this point, so I think what I will do is just summarize it very, very quickly by focusing on the three tables that in effect tell the story.

The first table gives the—it is Table 1 on Page 4. That gives the history of the airport trust fund and shows how the uncommitted balance rose up until 1980, then fell, and then with the introduction of the new taxes in the early eighties it is now beginning to rise again.

Table 2 tells about the projections of the airport trust fund, and these ar the ones that you have been discussing this morning.

I do want to talk about that just for a little bit. The top line is the pure CBO baseline. The way that he CBO baseline is computed, and this is standard across the whole budget, is by simply holding expenditures constant in real terms and keeping all present taxes such as the ticket tax and the fuel tax in effect, and under those projections, as you have already noted in this hearing, the uncommitted balance rises to $15 billion by 1992.

Now, there are several reasons, however, why I think one should be careful before getting too ecstatic about that number. The first is that the apparently noncontroversial increased capital funding for the NAS Plan would already lower that balance some by 1992. This has been pretty much adopted by the administration. I believe it is noncontroversial. It would be an expansion on government spending of about $300 million a year over this interval, and that would lower the balance by $2 billion, a little more than $2 billion in 1992. Then there are two other changes that do not change overall government spending, but they do change the interpretation of the trust fund, one that you have hassled about already with the administration witnesses, and that is whether the trust fund balances should or should nor fund the FAA operations account. We put in in effect their plan and if you put that in you get down to the 5.8 billion by 1992, and then the third is something that I have not heard discussed this morning, but there is an anomaly in the way that the airport trust fund calculates the interest income where they use the average statutory rate instead of market rates, and that that, a better adjustment there would lower the 1992 balance by a billion.

Now, if you put all these together you get the number in the bottom line which we call the expanded base line where it is expanded to include the increased funding for the NAS Plan and also for this FAA adjustment which I know is controversial, but if you want to see the numbers with that, there they are.

Then the third part of the testimony goes into some other options that CBO has, and as in keeping with other things that we do at CBO these are just options. We are not for them or against them. But they all are designed to deal with the congestion problem that is liable to remain even if the expanded NAS Plan calculations or expanded NAS Plan spending is done, and they all are—well, two of them are consistent with the overall budget problem of the government, which is something that as a representative of CBO I feel I must call attention to in a hearing like this.

Option One is the NAS Plan, but further enhanced to include more controllers, and you see that in that plan in addition to having the added government spending about doubled from the NAS Plan, the trust fund runs out of money in 1992. Option Two and Three are different mechanicms for what we call airport pricing. They are described in great detail in the testimony. The first one does have—Option Two. The first one does have added controllers, and it also replaces for large airports the airport grant with an ability of the airports to charge landing fees and other fees and in effect finance themselves.

We had a CBO study about two and a half years ago that argued that this was possible and so we have just in effect carried that out in Option Two. I should point out about Option 2 and 3 that they do have the mechanism in there for big reduction in the contestion problem, because there will be physical expansions, and also the landing fees gives a mechanism, another mechanism apart from the one that Senator Danforth mentioned just a second ago for spreading out the flights and to solve what economists call the peak load pricing problem, where airlines tend to bunch up in the peak hours and burden the traffic control facilities at that time, and if you had pricing schemes you could avoid that.

Option Three goes even further in having the FAA charge the airlines for the traffic control services. It would be somewhat similar to the various privatization schemes that are being talked about except not explicit privatization. So those are a few of the options. I would just like to summarize the whole thing by, Number One, recalling that there is an oveall budget problem, that it looks nice to look at this airport trust fund revenue and think of all the nice things you can do with it to provide facilities and so forth, but there is an overall budget problem, as I say, and further, as the testimony discusses, there is an interpretation problem with those trust funds, both the interest rate problem and the question of whether the FAA operation should be financed out of that.

So that point I will conclude the testimony, Mr. Chairman. The formal testimony is submitted for the record, and I am pleased to answer any questions.

I should say one other thing. To my right Mark Dayton is along here. He is the CBO expert on all matters involving the trust funds, so if you get too complicated I will have to turn things over to Mark.

Senator **Ford**. Thank you very much, Mr. Gramlich. As you know, and as you have listened here very patiently this morning, the biggest issue in our reauthorization effort this year is drawing down the balance of the Trust Fund. Yet we face the budgetary realities of Gramm-Rudman-Hollings. Given our current budgetary constraints, do you believe that we could significantly increase the spending from the Trust Fund in 1988?

Mr. **Gramlich**. Well, I think that in the Option Two and Option Three in the back of my statement those would be those kinds of options, and the reason is that you are trying to take advantage of economic efficiency in two ways, by first off expanding the domain of what I will call user fees by having the airlines themselves and also general aviation to somer degree pay for the services they use. So it is like a user fee. In the present political environment I will not call it a tax. But it is a user fee. And so that would allow for expansion of capacity. The second is that in pricing mechanisms like that you can spread out the flights and avoid the peak load problems. You may not need quite so many controllers. So given the budget problems, I would encourage the Congress to look carefully at options like taht. It seems to me that solves a lot of the problems simultaneously. It could solve the congestion problem, but being consistent with the overall budget problem, which is one that we worry about a lot.

Senator **Ford**. There is a growing consensus, I think, among aviation users that by taking the Trust Fund off-budget, full funding would be guaranteed. In your opinion would there be any constraints on full funding if the Trust Fund were taken off-budget? Would OMB or the various appropriations committees be involved in any type of annual review which could limit spending?

Mr. **Gramlich**. Well, if we are into options like that I would have to look at that more carefully. If we got particular options we would look at it. I suppose there are ways of taking it off budget. But still having some regulation of the trust fund. But the other thing I would point out is that I think the key question on something like that, that is, how it affects the overall budget, is not so much whether the trust fund is off budget, but whether the trust fund— whether off budget or on budget—pays for higher share of the FAA expenditures. If it does not, then my guess is, taking it off budget would lead to aggravation of the overall budget deficit problem because as you yourself pointed out and others have earlier, that if it is off budget, not paying for the FAA, then the ticket taxes will be lowered or spending will be higher and so the aggregate deficit problem will be worse.

I think there is no question of that.

Senator FORD. You have alluded to this next question, I think, but let me ask a direct question on it. One proposal offered to this subcommittee is to remove the air traffic control system from FAA, for example, letting it be administered by a public corporation. Do you have an opinion of whether the current user fees would sustain that operation or would fees have to be increased?

Mr. GRAMLICH. Well, again I would say that we might have to look at this option carefully but if our Table 2 indicative of that, it sounds like the current ticket tax and fuel tax would be adequate to pay for the user share of the FAA if that were off budget, because when that is done and the appropriate interest rate adjustments are made and so forth, that the trust fund balance is still okay in 1992, so I am going to interpret that the ticket fees would not have to be increased. But we will probably have to look at that option a little more carefully.

Senator FORD. In the defederalization program proposed, would larger airports that choose to defederalize have an advantage in attracting new services over those who do not?

Mr. GRAMLICH. Well, they cannot if they are full.

Senator FORD. How would it affect a medium-sized airport? Could they generate enough money to cover the cost? Or in your opinion would they need Federal aid to cover their capital needs?

Mr. DAYTON. I cannot say for certain, but the large and medium hubs currently only get about 10 percent of their total expenses from Federal assistance. Now, certainly some of the medium-size hubs maybe are worried about shifting some traffic to the competitors in terms of shifting hubs between them, so that certainly would be a concern. Since thy are only getting 10 percent of their budgets at this time, they may indeed be able to finance all of their costs or the loss of Federal costs by their own user fees.

Senator FORD. Mark, do you see any advantage or disadvantage under defederalization?

Mr. DAYTON. In terms of for the large airports?

Senator FORD. The point here is that we need to use this money for a better airline system in this country, a safer airline system. However, we find some of the major airports wanting to get out on their own. Then we have others that say we cannot make it on our own, and we are such an integral part of the system and we need a little help. On balance, is this proposal financially able to more adequately accommodate the problems today?

Mr. DAYTON. One of the advantages to the large airports self-financing is that it leaves the funding within the trust fund or the current expenditures in the base line to the remaining airports in the system, and that way there is more funding for those airports remaining in the system while the large airports who do have the capability to fund themselves are taken care of. So in that sense I guess I would say that it would take some pressure off the budget, and at the same time increasing airport capacity.

Senator FORD. Well, we could not leave the 8 percent ticket tax in place. We reduce that if you are going to shift the burden, rather than put it all in one pot and begin to divide it up. Would we not have to reduce the percentage or take it off all of those passengers going out of large airports? Some sophisticated system probably would have to be worked out.

Mr. GRAMLICH. You might want to do that, Mr. Chairman, but I think again the big question there is just exactly how much of the FAA is going to be funded out of this. Even if you killed the grants to the large airports, that would by our calculations have less impact on the trust fund than this FAA adjustment. I think that is the key one.

Senator FORD. Okay. My last question. Ned, you have advocated the use of market pricing to add airport capacity. How would this increase capacity at a hub airport where waves of aircraft arrive and depart at various times throughout the day according to airline schedules. Is there any way short of airport expansion to reduce delays?

Mr. GRAMLICH. Well, certainly eliminating the congestion of flights at peak times would do something. Now, I do not know enough about it to know how much you get from that, but there is no reason why airports could not charge a lot to land at 9:00 o'clock and 5:00 o'clock, for example, and then spread the flights out into the other hours. Then you would not have these enormous backloads at the heavy use times. There may need to be some expansion. I am not denying that. But I think that the principles of economics can help as well, and at this point we probably need everything we can get.

Senator FORD. I guess every community has peak traffic on highways on the streets twice a day. We try hard 7:30, 8:30, 8:00 to 8:30 coming to work and going out at 4:00, 4:30, and 5:00, but you still have your peak loads. I am not sure that we can ever reduce the peak caused by the desired time to leave. You fly into Washington early in the morning. You do your day's work, and you want to shuttle back to New York or Chicago. I do not know that an increase in landing or an increase in ticket price is still going to prevent the need or desire of airplanes leaving at those times. It may help some. The only way I can see is that you expand the ability for landings and takeoffs in order to accommodate that.

Mr. GRAMLICH. I can use an anecdote, if you will, Mr. Chairman.

Senator FORD. I use a lot of those. You go ahead. Sometimes people do not appreciate them.

Mr. GRAMLICH. I am one of these people who use airports at the worst possible time. I actually live in Ann Arbor, Michigan, and fly down from Detroit every Monday morning at 8:00 o'ckock, and I fly out of National at 5:00, and that is the convenient schedule for me given my work hours, but I have my price, and if the prices went way up on those flights I think I could modify behavior, and I suspect a lot of people could if it worked all the way through the system.

Senator FORD. Well, I am not sure that a couple of extra dollars on your ticket would change that. It would have to be significantly increased, I think, for you to change your work habit. When you talk about $5 that seems like a lot, but in order to leave on Monday and come back on Friday afternoon $10 a week is not going to stop you. The cumulative number may mean a lot of money.

Mr. **Gramlich**. There is one point here, Mr. Chairman. I think that is something like this. We can debate its effects and we need, neither one of us really knows——

Senator **Ford**. Until it has been tried to see if it works.

Mr. **Gramlich**. Exactly.

Senator **Ford**. I understand that. Of course, that is what we are here for, to try to pick each other to find ideas and ways to maybe adjust current law.

But I think we get down to dollars and how you can spend them wisely we may be back in touch with you and ask for some advice.

I appreciate your usual promptness in the way you have accommodated particularly this Senator, and I do thank you for that. So we will be visiting with you.

Mr. **Gramlich**. Thank you very much.

[The statement follows:]

Statement of Edward M. Gramlich, Acting Director, Congressional Budget Office

Mr. Chairman, I am pleased to appear before this Subcommittee to discuss the status of the Airport and Airway Trust Fund and the resulting implications for reauthorizing the fund. My testimony today will review:

The current financial status of the trust fund and, in particular, how the large and growing uncommitted balances in the fund can be interpreted;

CBO's baseline projections for the trust fund and alternative projections incorporating higher spending under the National Airspace System Plan, different spending patterns for the operations of the Federal Aviation Administration (FAA), and an updated method of accounting for interest income; and

Policy options for increasing the effective capacity in the airway and airport systems.

STATUS OF THE AIRPORT AND AIRWAY TRUST FUND

The Airport and Airway Trust Fund was established in 1970 and authorized for 10 years. Between fiscal year 1974 and fiscal year 1980—when trust fund authorization lapsed—the uncommitted balance in the fund grew continuously, from $284 million in 1974 to $3.7 billion in 1980, as revenues from taxes and fees outpaced commitments from the fund. This balance declined by nearly $2 billion over the next three years to $1.9 billion in 1983, when taxes and fees again accrued to the trust fund as a result of its reauthorization in 1982. Until 1986, the uncommitted balance in the trust fund remained fairly stable at about $2 billion. But as commitments from the fund have again lagged behind revenues in fiscal years 1986 and 1987, the balance is growing once more and is estimated to reach $5.2 billion at the end of this fiscal year.

Several factors have caused the growth in the trust fund balance. On the revenue side, tax rates for both the passenger ticket tax and general aviation fuel taxes were raised in the 1982 reauthorization. The ticket tax was reauthorized at 8 percent, up from the 5 percent collected between 1980, when the legislation lapsed, and 1982. Fuel taxes were raised from 7 cents per gallon before the authorization lapsed to 12 cents per gallon for gasoline and 14 cents per gallon for jet fuel. In addition, passenger traffic has increased by 63 percent since 1978, increasing the base to which the ticket tax is applied. Finally, interest income to the trust fund has benefited from the obsolete method used to calculate the interest rate applied to trust fund balances. This interest rate is an average coupon rate for all government securities rather than the current market rate which is used for other trust funds such as Social Security and Medicare. This rate trends to lag behind changes in market rates so that, in periods of falling rates, as have occured for the last few years, both the interest rate and the interest income earned by the trust fund are overstated. (Conversely, in periods of rising rates, the interest rate and the interest income would tend to be understated.)

Three conditions have affected the outlay side of the fund. First, spending for the modernization of the air traffic control system—the National Airspace Sytem (NAS) Plan—has fallen behind initial projections because of both program and budgetary constraints. Second, while annual outlays for airport grants-in-aid increased 45 percent from 1980 through 1986, trust fund receipts grew 57 percent in the same period. Finally, spending from the trust fund to support the FAA operations account has varied widely—from a low of 10 percent of air traffic control costs in 1984 to a high of 40 percent in 1983, for an average of 26 percent over the last eight years. These spending levels, in conjunction with restrained spending for both facilities and airport grants, have fallen short of growth in revenues. Table 1 shows the growth in outlays, receipts, and the uncommitted balance in the trust fund from the fiscal years 1980 through 1986.

TABLE 1.—HISTORY OF THE AIRPORT AND AIRWAY TRUST FUND, FISCAL YEARS 1980–86

[In millions of current dollars]

	1980	1981	1982	1983	1984	1985	1986
Uncommitted Balance [1]	3,686	3,021	2,156	1,882	2,234	2,039	3,889
Receipts:							
Tax revenues	1,874	21	133	2,165	2,499	2,851	2,736
Interest income	400	561	542	533	546	746	829
Total, receipts	2,274	582	674	2,698	3,045	3,598	3,565
Outlays:							
FAA operations	325	495	810	1,020	257	1,110	435
Airport grants-in-aid	590	469	339	453	694	789	853
Facilities and equipment [2]	230	252	292	248	268	425	758
Research, engineering, and development [2]	78	89	72	71	146	262	293
Aviation weather service [3]	0	0	0	0	27	27	27
Total, outlays	1,224	1,306	1,512	1,792	1,392	2,613	2,365

[1] The uncommitted balance is for the end of each fiscal year. The uncommitted balance is the cash balance in the trust fund less obligated and unobligated balances.

[2] These two accounts encompass NAS Plan spending.

[3] Since fiscal year 1984, the aviation weather services program of the National Oceanic and Atmospheric Administration has been supported by the trust fund.

Source: Congressional Budget Office.

CBO BASELINE, AND ALTERNATIVE PROJECTS FOR THE TRUST FUND

CBO's baseline projections for the uncommitted balance in the trust fund for the next five years are presented in Table 2. This balance will grow from over $5 billion at the end of this fiscal year to nearly $16 billion by the end of 1992, assuming all trust fund taxes and fees are reauthorized at their current levels. While this balance is large and growing rapidly, the surplus might not actually materialize. CBO's baseline is constructed under a number of assumptions that are likely to be altered in reauthorized of the trust fund. Under the various alternative projections shown in Table 2, the balance in the trust fund could decline in 1992 from the baseline level by as little as $1 billion or by as much as $13 billion.

The constraints on CBO's projections are related to the reasons underlying the current large surplus in the fund. First, the baseline estimates do not include the acceleration in facilities and equipment spending for the NAS Plan that the Administration has proposed for 1988 and beyond. The increase in NAS Plan outlays proposed by the Administration would provide funding that was deferred by the development and budgetary delays of the last several years. If these higher funding levels are included in our projections, NAS Plan outlays would increase by an average of $300 million per year and the uncommitted balance in the trust fund would fall by about $2.5 billion, to $13.2 billion in 1992.

TABLE 2.—PROJECTIONS FOR UNCOMMITTED BALANCE IN THE AIRPORT AND AIRWAY TRUST FUND, FISCAL YEARS 1987–92

[In millions of current dollars]

Projection method	1987	1988	1989	1990	1991	1992
CBO baseline [1]	5,196	6,735	8,501	10,566	12,969	15,731
CBO baseline adjusted for increased NAS plan funding [2]	5,196	6,222	7,354	8,807	10,761	13,187

TABLE 2.—PROJECTIONS FOR UNCOMMITTED BALANCE IN THE AIRPORT AND AIRWAY TRUST FUND, FISCAL YEARS 1987–92—Continued

[In millions of current dollars]

Projection method	1987	1988	1989	1990	1991	1992
CBO baseline adjusted for 75 percent funding of FAA operations account [2]	5,196	5,066	4,998	5,061	5,307	5,759
CBO baseline adjusted for market interest rate	5,196	6,631	8,261	10,140	12,324	14,826
CBO baseline adjusted for NAS plan, FAA operations,and market rate [2]	5,196	4,457	3,648	2,974	2,644	2,629

[1] The baseline projection assumes that all trust fund taxes and fees are authorized at their current levels

[2] While each of these adjustments alters outlays from the trust fund and the uncommitted balances in the fund, only the increase in NAS Plan spending results in increased government outlays in the federal budget

Note All amounts are for the end of each fiscal year

Source Congressional Budget Office

Second, under the CBO baseline, spending from the trust fund for FAA operations is maintained at the relatively low rate of 23 percent that is estimated for this fiscal year. In other words, 77 percent of the operating costs of the air traffic control system are attributed to general revenues. Many proposals have been made to use trust fund revenues to fund the entire nomilitary portion of the services provided by the FAA. If, in conjunction with other trust fund spending, 75 percent of FAA operations were paid for from the trust fund, the fund would support 85 percent of the FAA budget, equal to the civilian use of the airway system. By increasing trust fund support for the FAA operations account to 75 percent in our projections, the balance in the trust fund in 1992 would decline by about $10 billion to $5.8 billion. This change from general revenue to trust fund spending would neither increase or decrease government outlays, but merely change the accounting for those outlays.

Third, interest income to the fund continues to be computed at the average coupon rate instead of an appropriate market rate (which overstates both the interest rate and income). If the projections are calculated using CBO forecasts for the market rates on medium-term government bonds, the surplus in the fund would drop by $1 billion to $14.8 billion in 1992.

While each of these adjustments alters the projections for uncommitted balances in the trust fund, only the change in accounting for FAA operations and NAS Plan spending would change outlays from the trust fund. Of these two, only the increased funding of the NAS Plan would result in higher government outlays in the federal budget.

Finally, if all these changes were incorporated into our projections for the trust fund, the uncommitted balance would drop by over $13 billion, to $2.6 billion in 1992. This balance is equal in real terms to $1.8 billion, or less than the average real balance of $2 billion that existed in the account over the 1982-1985 period, before the recent growth in the surplus. Therefore, through only two changes in current financial transactions—accounting for interest rates and FAA operations—and through holding all outlays constant in 1987 dollars except for the rise in NAS Plan spending, the projected surplus in the account would be halved by 1992 to $2.6 billion and would be less, in real terms, than its level of a decade earlier.

POLICY OPTIONS FOR INCREASING CAPACITY IN THE AIRWAY SYSTEM

The level of resources available to the airport trust fund is particularly significant considering the Congress's concern over capacity in the airport and airway systems and their ability to handle safely both the increase in traffic and the shift in traffic patterns that have occurred since the passage of the Airline Deregulation Act of 1978. Capacity and safety in the airway system are integrally linked. Given the level of physical capacity in the airway system, each level of operations, or number of planes handled, embodies a certain level of safety in the system. Alternatively, given the physical capacity, each possible level of safety in the system implies a maximum level of operations.

Physical capacity in the airways system depends on three factors: (1) facilities and equipment, such as radars, computers, communications systems, and airport facilities; (2) labor, including controllers, flight service specialists, maintenance workers, and airport personnel; and (3) operating procedures and flight rules. When in normal working order and in good weather, the elements of the system, taken together, provide a certain peak (or "design") capacity for each airport and segment of the airway system and for each operational time slot. Current capacity is still affected by the 1981 controller strike and dismissals. If, in addition, the weather deteriorates or equipment fails in part of the system, the effective operating capacity must suffer—either the number of planes handled must depart from design capacity or safety margins will decline. Departure from design capacity results in increased delays and a shift of operations among time slots. The alternative is to maintain the number of planes moving through the system and to permit the safety margins that are built into operating procedures and design capacity to suffer.

While the FAA maintains that the latter has not occurred, the Congress has expressed concern that just such pressure on capacity is affecting safety margins. Although CBO cannot address the issue of safety, we can note that budget options for improving capacity would improve system safety as well.

Many proposals have been put forth to increase capacity in the airway system and to improve safety margins. Each addresses one or more of the elements that constitute system capacity—for example, hiring more controllers, accelerating modernization of air traffic control equipment, or increasing airport grants for capacity improvements. In the balance of my testimony, I will discuss three alternative approaches, the first of which principally addresses increasing design capacity in the system to reduce peak-period congestion. The second and third options, while also addressing peak capacity, attempt to use idle, off-peak capacity to substitute for some new investments in the airport and airway systems.

Option I: Enchanced Current Policy.—Option I is a variation on the combined, adjusted baseline presented in the last line of Table 2. In this option, as in Table 2, NAS Plan spending would be increased in line with the FAA's request, 85 percent of FAA spending would be financed by user taxes collected into the trust fund rather than by general revenues, and a market interest rate would be used. These changes would allow annual airport funding to be increased by about $500 million after inflation and would provide the FAA with funds to hire an additional 500 controllers by 1989 and 1,000 controllers by 1991. If these spending increases were made, the trust fund surplus would be consumed at the end of the five-year period. Projections for the effects of this option on the trust fund can be seen on the third line of Table 3.

This approach would provide modest short-term relief until the capacity and reliability benefits of the NAS Plan can be achieved. The major advantage of this option is that most of the programs are already in place so that few additional uncertainties or delays would be introduced into the system. Some earmarking of the additional airport grant money or retargeting of existing grants might be desirable. This option also has two major disadvantages. First, major capacity improvements would not occur until the mid-1990s. Second, since this alternative would eliminate trust fund balances by the end of the five-year projection period, additional taxes or fees might be required. It should be noted that this option would not change the kind of taxes now imposed; that is, taxes would play no role in allocating flight capacity over time periods with varying levels of congestion.

TABLE 3.—PROJECTIONS FOR UNCOMMITTED BALANCE IN THE AIRPORT AND AIRWAY TRUST FUND, FISCAL YEAR 1987–92, UNDER ALTERNATIVE POLICY OPTIONS

[In millions of current dollars]

Option	1987	1988	1989	1990	1991	1992
CBO baseline [1]	5,196	6,735	8,501	10,566	12,969	15,731
Accounting adjusted baseline plus capital expansion [2]	5,196	4,457	3,648	2,974	2,644	2,629
Option 1:						
Enhanced current policy [3]	5,196	3,968	2,631	1,380	420	262
Option 2:						
Airport pricing [4]	5,196	4,433	3,593	2,903	2,555	2,520
Option 3:						
Airway and airport pricing [5]	5,196	4,457	3,648	2,974	2,644	2,629

[1] The baseline projection assumes that all trust fund taxes and fees are reauthorized at their current levels.

[2] This adjusted baseline is the same as the final entry in Table 2.

[3] This option would add 1,000 controllers and higher airport spending ($500 million annually to the CBO adjusted baseline.

[4] This option would add 500 controllers to the CBO adiused baseline and require large airports to finance their own capital requirements through independent pricing.

[5] This option would require the FAA to add a surcharge for air traffic control services during peak periods and recquire large airports to finance their own capital requirements.

Note: All amounts are for the end of each fiscal year.

Source: Congressional Budget Office.

Option II: Airport pricing.—This alternative is similar to Option I in that it begins with the combined, adjusted CBO baseline and adds funding for 500 additional controllers by 1989. The adjusted projections for this option appear in the fourth line of Table 3. In addition, this option would make the largest airports ineligible for airport grants and require them to provide all funds for their capacity improvements. Under this option, the current baseline funding levels in the airport grant program would be maintained and would be available to improve facilities at reliever, medium-sized, and smaller commercial airports. Expansion of these airports might relieve congestion experienced at the larger hubs in the system.

Capacity improvements at the larger, more capacity constrained airports would be funded by the airports themselves through landing-right pricing, rents, and other fees. A 1984 CBO study, "*Financing U.S. Airports in the 1980's,*" showed that, in fact, larger airports are currently funding or are capable of funding their own investment requirements through a combination of bonds and retained earnings.

Besides providing the income necessary to support capacity improvements, permitting large airports to price their landing rights by time of day might reduce delays and the costs they impose on airlines and travelers. To the extent that flights were rescheduled, fewer new controllers would be needed (since traffic flow peaks would be reduced and excess controller capacity at off-peak hours would substitute). Indeed, those flights and passengers still wishing to use the airport at peak times could do so by continuing to patronize more expensive peak-hour flights. This option would reduce the trust fund balance somewhat, but would not require an increase in existing passenger taxes. Since the large commercial airports would institute new fees, total taxes and fees in the system would increase.

A disadvantage of this approach would be the uncertainty about how the system would work. Before the system could begin to provide the correct market signals to both passengers, airlines, and airport operators, a shake-out period could be required, during which fees and prices would be adjusted.

Option III: Airway and airport pricing.—Option III is the same as Option II without the addition of air traffic controllers but with the addition of time-of-day pricing for FAA air traffic control services. This option would maximize substituing existing capacity for new capacity by shifting flights to off-peak hours. To the extent that passengers were willing to pay higher prices for the opportunity to fly in peak flight times, the income from slot fees could be used by both the airports and the FAA to increase capacity. This option would keep in place all existing taxes and fees and merely add peak-hour charges by the FAA for the use of the air traffic control system. If, in the face of high peak-hour fees, passengers continued to demand peak-hour service, than the FAA could be authorized to use the fee income to hire additional controllers and take whatever other steps were needed to increase short-term capacity.

A variation on this proposal could include rebates of a portion of the ticket tax to induce off-peak use of the air traffic control system. Eventually, the flat fees and taxes currently in use could be replaced by a system of prices determined by available FAA capacity and passenger and airline demands for services. The last line in Table 3 shows the projected trust fund balance for Option III as unchanged from the last line in Table 2. The net effect on the trust fund balance from the additional fees to the FAA and potential expenses from additional controllers and other spending is uncertain. It is, however, likely to balance out or to increase uncommitted balances in the fund. After the fees had been used for a period, the Congress cold reexamine revenues and spending levels to determine if adjustments were required.

A disadvantage of this approach is that such a system might take time to develop and institute. On the other hand, the airlines are already pricing their peak and off-peak flights through the use of discount fares. Because airlines offer fewer discount seats during peak hours and thus receive higher revenues, the market is already providing some effective pricing signals (although not for the air traffic control system). A full-blown system of capacity pricing for both airports and the air traffic control system, therefore, might be no more than an extension of existing pricing practices.

In both Options II and III, the charges based on time-of-day for landing rights at airports and for use of the air traffic control system would apply to general aviation as well as to commercial air carriers. Since 1984, general aviation users have accounted for about 47 percent of the annual, nonmilitary instrument operations at airports with FAA air traffic control. Over the same period, general aviation, through fuel taxes, has supplied only 4 percent of trust fund tax revenues. These users of air traffic control services impose the same burden on the system as do commercial flights. Therefore, requiring them to pay peak-period charges either will cause them to shift their use of air traffic control and airport capacity to other times of the day and to less congested airports, or force them to pay the true cost of the burden they impose on the airport and airway systems.

Using pricing to allocate scarcer peak-time airport and air traffic control capacity has the additional advantage of subjecting the demands for additional capacity in both of these systems to an economic test. So long as take-off and landing rights and air traffic services during peak times of the day are sold for less than the cost of providing new, comparable capacity, the demand for them will exceed the supply. We have no way, therefore, of gauging the "true" level of congestion in the airport and airways systems, since these services are provided at less than their true costs. Using prices to allocate peak-time capacity would permit us to observe what air carriers are willing to pay for it, and, in turn, the extent to which new airport and airway capacity is economically justifiable.

CONCLUSION

The Airport and Airway Trust Fund will accrue large and growing balances by 1992 if all taxes and fees are reauthorized at their current levels and if spending from the trust fund continues at the same real level as in this fiscal year. While part of this $10 billion growth in the trust fund surplus is illusory, congestion in the airport and airway systems is not. My testimony has suggested several options for reducing this congestion and increasing capacity as well. The modest, real balances in the trust fund could be used to increase funding for the NAS Plan, to authorize additional air traffic controllers, and to increase federal grants-in-aid to airports. In addition to increasing the supply of airport and airway facilities and capacity, the demand for these services could be shifted. Airport and airway pricing of peak-period operating and landing rights could provide incentives for users of the system to reschedule flights and/or increase the funding for expansion that would be available to both airports and the air traffic control system.

Mr. Chairman, I would be happy to answer any questions at this time.

ATTACHMENT.—PROJECTIONS FOR THE AIRPORT AND AIRWAY TRUST FUND, FISCAL YEARS 1987–1992

[In millions of current dollars]

	1987	1988	1989	1990	1991	1992
CBO Baseline:						
Uncommitted balance	5,196	6,735	8,501	10,566	12,969	15,731
Receipts:						
Tax revenues	3,120	3,388	3,625	3,935	4,272	4,625
Interest income	801	876	970	1,072	1,188	1,315
Total, receipts	3,921	4,264	4,595	5,007	5,460	5,940
Outlays:						
FAA operations	621	652	674	698	722	746
Airport grants-in-aid	876	942	999	1,039	1,084	1,129
Facilities and equipment [1]	820	925	951	952	990	1,114
Research, engineering, and development [1]	204	166	156	160	168	176
Aviation weather service [2]	29	30	31	33	34	34
Total, outlays	2,550	2,716	2,811	2,882	2,998	3,201
CBO baseline adjusted for increased NAS plan funding:						
Uncommitted balance	5,196	6,222	7,354	8,807	10,761	13,187
Receipts:						
Tax revenues	3,120	3,388	3,625	3,935	4,272	4,625
Interest income	801	874	959	1,042	1,129	1,224
Total, receipts	3,921	4,262	4,584	4,977	5,401	5,849
Outlays	2,550	2,757	2,985	3,204	3,422	3,652
CBO baseline adjusted for 75 percent funding of FAA operations:						
Uncommitted balance	5,196	5,066	4,998	5,061	5,307	5,759
Receipts:						
Tax revenues	3,120	3,388	3,625	3,935	4,272	4,625
Interest income	801	807	767	735	718	713
Total, receipts	3,921	4,195	4,392	4,670	4,990	5,338
Outlays	2,550	4,340	4,437	4,542	4,681	4,905

ATTACHMENT.—PROJECTIONS FOR THE AIRPORT AND AIRWAY TRUST FUND, FISCAL YEARS 1987–1992—Continued

[In millions of current dollars]

	1987	1988	1989	1990	1991	1992
CBO Baseline adjusted for market interest rate:						
Uncommitted balance	5,196	6,631	8,261	10,140	12,324	14,826
Receipts:						
Tax revenues	3,120	3,388	3,625	3,935	4,272	4,625
Interest income	801	772	834	886	969	1,055
Total, receipts	3,921	4,160	4,459	4,821	5,241	5,680
Outlays	2,550	2,716	2,811	2,882	2,998	3,201
CBO baseline adjusted for NAS plan, FAA operations, and interest rate:						
Uncommitted balance	5,196	4,457	3,648	2,974	2,644	2,629
Receipts:						
Tax revenues	3,120	3,388	3,625	3,935	4,272	4,625
Interest income	801	709	649	580	533	490
Total, receipts	3,921	4,097	4,274	4,515	4,805	5,115
Outlays	2,550	4,381	4,611	4,864	5,105	5,356

[1] These two accounts encompass NAS Plan spending.

[2] Since fiscal year 1984, the aviation weather services program of the National Oceanic and Atmospheric Administration has been supported by the trust fund.

Notes: All uncommitted balances are for the end of each fiscal year. The baseline and adjusted baseline projections assume that all trust fund taxes and fees are reauthorized at their current levels.

Source: Congressional Budget Office.

Senator **Ford**. This hearing is recessed.

[Whereupon, at 12:25 p.m., the subcommittee was adjourned, to reconvene upon the call of the Chair.]

AUTHORIZATION OF THE AIRPORT AND AIRWAY TRUST FUND

TUESDAY, APRIL 7, 1987

U.S. Senate,
Committee on Commerce, Science, and Transportation,
Subcommittee on Aviation,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:30 a.m., in room SR-253, Russell Senate Office Building, Hon. Wendell H. Ford [chairman of the subcommittee] presiding.

OPENING STATEMENT BY SENATOR FORD

Senator Ford. I would ask that the committee come to order. I will go ahead and make my opening statement. Senator Murkowski is on his way. He will be our first witness this morning.

We are going to attempt to hold the witnesses to five minutes, with limited questions and a request that questions in writing be answered and answered promptly.

This is the second of the Aviation Subcommittee hearings on the reauthorization of the Airport and Airway Trust Fund. Two weeks ago, we held an overview hearing with testimony from the administration and the Congressional Budget Office on the condition of the trust fund. Today we will narrow our focus to the Airport Improvement Program, which in the past five years has provided almost $5 billion in development grants to communities around the country to assist in building runways, airport terminals, and noise abatement projects.

In no uncertain terms, the AIP program has been a success. Funding levels have increased from $450 million in 1982 to a billion dollars in the current fiscal year. However, we are not making adequate headway toward our mandate of providing the capacity needed to accommodate the growing demand of aviation users.

Delays have reached an outrageous level, as record traffic has created congestion at many of our major airports. There is no denying that more money is needed to fund further expansion of airport capacity.

Witnesses that will appear here today will suggest that as much as $2 billion a year is needed for AIP. And while that figure may be unattainable because of our budgetary woes, I am committed to working for a substantial increase above the current funding level.

I am also interested in hearing from our witnesses about the need for revisions in the AIP program. With the FAA predicting that record levels of traffic will continue to grow, we must maximize the efficient use of these limited funds.

These hearings are critical to our efforts to make the Aviation Trust Fund work, and I look forward to the testimony today, as well as working with each of those witnesses to accommodate to the best of my abilities their needs and desires.

I am very pleased to have Senator Exon with us today. Do you have any statement you would like to make?

OPENING STATEMENT BY SENATOR EXON

Senator EXON. A very brief statement. Then we will move right on to Senator Murkowski, our colleague.

Mr. Chairman, I want to congratulate you for the earlier hearing and calling this one. I think this is a tremendously important matter that all too frequently is not getting the attention that it deserves. The Chairman is certainly right in calling these meetings and getting the advice and input that is vitally necessary to us.

One of the major disgraces, I think, that we have today is with all of the difficulties that we have in the air transportation system today. They cannot all be solved with money, but some can. Part of the problem is that the current administration and previous administrations refuse to spend the money that is in the Highway Trust Fund.

Of course, it is there because people pay into it every time they buy a ticket on an airline. It was designed and set up for the purpose of earmarked funds, to be targeted to airport use improvement and safety.

Unless we can change the minds of this administration, as we were unsuccessful in changing the minds of previous administrations, and unless we spend the money that is specifically allocated to be spent for the right purposes, then we should consider reducing or eliminating the tax that is being charged on every ticket purchased.

That dedicated fund was never intended to be used to offset the budget deficit. Currently, it is being used as an offset to make the country look better off financially than it actually is.

So the hearings that we are going forth with on this matter and eventually the measures that we will get passed in this area are significant steps in the right direction.

And I thank the gentleman for his leadership.

Senator FORD. Thank you, sir.

I have a statement that Senator Hollings would like to have included in the record.

[The statement follows:]

OPENING STATEMENT BY THE CHAIRMAN

Mr. Chairman, today, the Aviation Subcommittee continues its efforts to reauthorize one of the most critical programs funded by the Aviation Trust Fund—the Airport Improvement Program.

The Aviation Trust Fund was created in 1970 by Congress to repond to the projected increases in airline travel, and the corresponding burden on airport capacity. The Airline Deregulation Act of 1978, which gave the airlines increased freedom in establishing their fares and schedules, increased the number of airline travelers and further added to the airport capacity dilemma.

Congress has responded on several occasions with legislation intented to cure the capacity problem. The most recent reauthorization of the Trust Fund, the Airport and Airway Improvement Act of 1982, also sought to address the problem by significantly increasing user fees, as well as spending for both Airport Improvement Program and the National Airspace System Plan. Although the efforts have been gallant, airport capacity remains an unresolved issue. Our airports and airways are busting at the seams and, if we fail to adequately respond, the consequences are sure to be severe.

What is ironic about this situation is that the money is available to remedy the problem. The taxes have been levied and the money collected. The uncommitted surplus in the Trust Fund, currently at approximately $5 billion, is an indication of not only the availability of the funds, but also of the need to develop a more efficient spending mechanism. The aviation users who contribute to the Trust Fund deserve a better return on their investment.

Today, we have the opportunity to both understand our previous failures and to ensure future capacity needs are provided for, thus eliminating delays and ensuring adequate safety. I look forward to today's hearing and to working with Chairman Ford on developing an authorization bill which satisfactorily addresses these matters.

Senator **Ford**. Senator Murkowski, we look forward to your statement this morning. You can either make it from here or down at the table, whatever suits you best.

Senator **Murkowski**. I think I will probably go down as a witness, Mr. Chairman.

Senator **Ford**. We look forward to that. That way we can question you a little easier.

Senator **Exon**. I was trying to get him to sit up here on the Democratic side of this table, but I could not get him nailed down very long, Mr. Chairman.

Senator **Ford**. We will just see how he votes. It does not make any difference what side he is on.

STATEMENT OF HON. FRANK H. MURKOWSKI, U.S. SENATOR FROM ALASKA

Senator **Murkowski**. Mr. Chairman, I appreciate the opportunity to be with you. More often than not, we share duties on the Energy Committee on different sides, and I have the utmost respect for your opinion. I thank you for holding this significant hearing to focus on the reality that our country is losing market shares in virtually every productive traditional industry that we have.

And Senator Exon, I appreciate your remarks as well.

My purpose in coming before you today is to address S. 764, the legislation that has been co-sponsored by some 30 of our colleagues and endorsed by the International Engineering and Construction Industries Council. This legislation would amend, Mr. Chairman, the Airport and Airways Improvement Act of 1982 to prevent foreign firms whose home countries do not allow U.S. design, construction, and engineering firms fair access to government funded public works projects, from participating in projects in the U.S. funded under the Act.

It simply, Mr. Chairman, requires reciprocal access to markets. S. 764 is intended to address the inability of U.S. firms to gain meaningful access to markets, particularly the markets in Japan, for government-funded major projects. And specifically the example we are using is the construction of the new Kansai International Airport in Osaka.

One year ago, Ambassador Mansfield went to Osaka. In a meeting with the Japanese government and industry officials, his message was the same: The U.S. wants open bid and tender on Kansai Airport with other major projects in Japan.

In the past 12 months we have made concentrated effort to negotiate with the Japanese on this matter. This chart on your left and my right, held by Ms. Jamie Boucher of my staff, perhaps is a little small and a little difficult to see. Bill Triplett, of the Foreign Relations Committee staff, is also here.

But the chart represents a coverage of 30 meetings held since 1986 between U.S. officials and the Japanese on this single issue of Kansas Airport. But the point I want to make, Mr. Chairman, is that this chart does not skim the surface of industry efforts.

Mr. Chairman, the Kansai International Airport Company has awarded over a billion dollars in contracts to Japanese firms. To my knowledge, so far only three U.S. firms have received contracts, and those contracts amounted to less than a million dollars, in relationship to the billion that has already been awarded.

It is anticipated that the Japanese plan to announce a token purchase very soon of three dump trucks and a bulldozer. Combined, these contracts would total approximately $1.5 million to $2 million, on this $8 billion project.

I would like to refer to this chart, Mr. Chairman, because it is quite significant. Japanese firms are doing well in the open markets of the United States as far as construction is concerned. In 1981 their U.S. business was less than $50 million, and you can see that on the chart in 1981.

In 1985, Japan construction firms did almost $2 billion of work, we are told. In 1986 the chart indicates that Japanese construction firms doing business in the United States will approach $4 billion. This includes architect-engineering, design, construction. It does not, of course, include any of the Japanese labor.

This activity has not been limited to the private sector, and I think it is very important to point this out. Japanese firms have won contracts on several public works projects, including a $50 million tunnel in Arizona, a $63 million contract for the Elk Creek Dam in Oregon, a $30 million hydro plant in Kentucky—I am sure the chairman is aware of this—and, surprisingly enough, the Japanese are building the U.S. embassy in Cairo.

Not that there is anything unusual about it, but it does appear that their construction industry is able to move about without any stipulations of any kind.

Now, I would like to refer——

Senator EXON. Are there any bugs being put in that embassy?

Senator MURKOWSKI. I think that that is a subject for the Intelligence Committee, Senator Exon. We have to have something to do.

Despite the opportunities accorded Japan in the United States construction market, American firms have been locked out of the market in Japan for the past 20 years. Now, there is a tiny spot on that chart. It is almost too small to see—I am sure Senator Ford can see it—with the naked eye. It represents the small contracts awarded on Kansai. And you might show that to the audience as well.

What is this Kansai project that people are making such a fuss over? I was one of the first to have an opportunity to visit Kansai on December 7th of last year. I went out in Osaka Bay in a small boat on a very stormy day and observed the project.

It is going to be an airport located approximately three miles from Osaka. It is going to be built in 90 feet of water. It is going to be two miles long and a half mile wide, and will truly be one of the construction wonders of the world.

It is an enormous undertaking. It is a project, obviously, that could be fraught with substantial cost overruns. But it is significant, inasmuch as it constitutes the first identified project in over $62 billion worth of major public works planned for the next decade in Japan.

You do not have to be an expert to recognize the difficulties of participating in further projects if you cannot participate in the first one. This series of charts shows the breakdown of the $62 billion worth of construction planned in Japan in the next decade.

We have the Kansai International Airport, the expansion of the Narita Airport, the expansion of various other airports and other projects that are self-evident.

Now, U.S. firms have expressed strong interest in participating in these. However, they have faced formidable barriers. Last March, U.S. and Japanese subcabinet level officials met to discuss foreign participation on Kansai. Immediately thereafter, the chairman of the leading Japanese construction industry trade association held a news conference on the matter. His words appeared the next day in all the major Japanese newspapers, and the quote was: "Foreigners need not apply."

Bear in mind, Mr. Chairman, the Japanese individual who said "Foreigners need not apply" won a contract worth almost $2 billion in rehabilitation work in Manhattan in a joint venture with Zeckendorf. In fact, all the major players active in keeping American firms out have expanding and profitable business interests in the United States.

Frankly, Mr. Chairman, the Kansai situation, I think you will agree, is just plain outrageous.

In the face of such problems, we must pressure Japan to open Kansai and future public works projects to U.S. participation. The point of this bill, S. 764, is to do just that.

In the United States, Federal procurement contracts must comply with procurement and competitive laws. Our law is based on the policy that real opportunities for all potential bidders result in the greatest efficiency for the government and the most reasonable cost for the taxpayer.

American construction is not bound by buy America restrictions. Since the enactment of the Airport and Airway Improvement Act of 1982, buy America restrictions have not been imposed on Federal grant money for airports. Federal law does not bar procurement of foreign construction services, nor does it discriminate on the basis of the ownership of the firm.

As I stated earlier, this policy is in our national interest. However, I believe we must use the leverage of our market as Japan's largest single customer to gain similar opportunities for U.S. firms abroad.

I might remind the chairman that, while it is difficult oftentimes to address the issue of reciprocity, we have seen in our negotiations with the Japanese of late that that is the only thing that seems to really get their attention and that they respond to.

We have recently seen the resolution of an issue involved with fisheries, where Japan had quotas on imports of surimi. After about an 18 month period in which negotiations have occurred, where we threatened legislation to put on tariffs on their surimi coming into the United States, Japan finally dropped the matter. And I cannot help but believe, Mr. Chairman, that it is a result of the fact that we meant business. We indicated that we would initiate reciprocal legislation.

So in conclusion, Mr. Chairman, S. 764 is based on the premise that the market for construction services for airport improvements will remain open to participation by foreign firms unless the USTR determines, based on its annual report on foreign trade barriers and other relevant factors, that the home country of a foreign bidder or a U.S. subsidiary with major foreign ownership does not allow U.S. firms to participate in procurement and bidding on major public works projects.

That is the reciprocation. The bill contains an exemption from this provision if the Secretary of Transportation determines that application would not be in the best public interest, or a product or service is not produced or offered in the United States in sufficient and reasonable quantities, or exclusion would raise the project cost by more than 20 percent. That is the last stipulation.

I think, Mr. Chairman, that the Kansai issue has become symbolic in the construction industry of the entire market access problem in Japan. While other market access issues, like super computers, are relatively complex, it is easy for the average citizen to understand a score of two billion dollars to nothing. They know U.S. firms can build airports all over the world, yet Kansai has come to mean simply "Closed to American participation."

Secretary Baldrige and Ambassador Yeutter are concerned about the inequity of Kansai. However, I believe that, due to the domestic situation in Japan, we cannot expect progress unless the industry and the U.S. Congress keep the pressure on Japan.

We must not let up until U.S. firms are offered the same access to the Japanese market as the Japanese enjoy in the United States. And that is simply a question of fairness. Therefore, I urge respectfully that your committee include the provisions of S. 764 in the legislation to reauthorize the Airport and Airways Improvement Act.

It has been said by one of our chief negotiators that he wonders if we can have any negotiated agreement with Japan without threatening to initiate some retaliatory action.

And I think with that, Mr. Chairman, I would conclude my remarks. I appreciate this opportunity, and I would be happy to answer any questions.

Senator **Ford**. Thank you very much, Senator.

I only have two quick questions. First, you are asking that S. 764 be a part of the airport reauthorization bill. Is that correct?

Senator **Murkowski**. That is correct.

Senator FORD. Has the State Department had any contact with you as a result of your proposal?

Senator MURKOWSKI. We have had some initial conversations, and they have not taken a firm position, but we are urging them to do so in support of my amendment.

Senator FORD. Senator Exon.

Senator EXON. No questions. I was very much interested in the presentation, Senator Murkowski. This just indicates once again the tremendous difficulties that we have in dealing with the Japanese and how they seem to outfox us on every occasion.

Thank you for your interesting proposal.

Senator FORD. Senator Danforth.

Senator DANFORTH. Mr. Chairman, thank you very much.

Senator Murkowski has been leading this fight for some time, and it is an important fight. You know, there have been many examples that should have demonstrated long ago that Japan simply is not interested in doing business with the United States.

They are interested in doing business if it means making sales to us, but not if it means buying anything from us that they do not absolutely have to have or that they cannot produce for themselves.

Sometimes the more ridiculous examples are relatively small items. For example, we all know that the Japanese do not buy American baseball bats, the reason being that American baseball bats do not meet the standard in Japan for what a baseball bat should be. They know what baseball bats should be and we do not.

Japan takes the position that American skis, skis made in America, are not suitable for use in Japan. Their reason they are not suitable for use in Japan, say the Japanese, is that their snow is different from snow in the United States and our skis are not made for Japanese snow.

Now the excuse, as I understand it, for the Kansai Airport shutout, lockout, is that the soil in Japan is different from the soil in other places in the world and, although American contractors and American engineers are able to build airports all over the United States and all over the world, Japan is different from the rest of the world and we cannot, and we do not understand their soil.

The difference in this case, of course, is that this is a big deal. Baseball bats, skis, relatively small items in volume; but airport contracts are a big deal.

And I think what Senator Murkowski has done is to point out a major item that is symbolic of the way we are being treated in Japan by Japan. I think also he has pinpointed the only effective way to deal with unfair trade practices by the Japanese.

Certainly we have tried talking. We have tried complaining. We have tried griping. We have tried sending delegations to Japan to express complaints. We have tried all that.

And I think what Senator Murkowski has pointed out is that the time comes when we must move beyond verbal complaints to setting up some sort of disincentive to unfair trade practices, and that is exactly what he has proposed.

And so I do not have any questions, Mr. Chairman. But I would like to thank Senator Murkowski for being here this morning, for his leadership on this issue, and express to him my strong support for what he is trying to do.

Senator FORD. Senator McCain.

Senator McCAIN. No questions, Mr. Chairman. Thank you.

Senator FORD. Senator Kassebaum.

Senator KASSEBAUM. Thank you, Mr. Chairman.

I would just like to ask Senator Murkowski if you have asked any of the airport managers involved with the airport improvement program what they think about your legislation. Have you had any input from any of the airport managers?

Senator MURKOWSKI. Not directly, Senator Kassebaum. We have had input from the Associated General Contractors of America and various professional groups representing architect-engineering, and they feel very strongly that they have a very positive contribution to make if inded they were brought into the Kansai planning, simply because the Japanese historically have had some difficulty with their airports, as is pointed out by the experience with Narita and some of the idiosyncrasies of that particular plan which are not necessarily the state of the art in planning of airports.

But we would be happy to seek out the opinion of airport managers.

Senator KASSEBAUM. Well, my apologies for coming in late.

I know that you have had a keen interest in this for a long time, but I did not know whether there had been any ability for anyone to assess what impact it might have on the airport improvement fund levels if indeed foreign firms were not allowed to bid, if indeed there was not some reciprocal work.

Senator MURKOWSKI. There are certain provisions in the proposed legislation that, if indeed the cost increase were over 20 percent, the Secretary of Transportation could waive the requirement, and other provisions if indeed the same services are not available in the United States. And so there are portions to address the necessity of U.S. firms being competitive in providing the services domestically as we address about $25 billion worth of airport funding in the next decade.

Senator KASSEBAUM. Thank you very much.

Senator MURKOWSKI. Mr. Chairman, I wonder if I could make one short concluding comment. I am sure we are all aware of the condition of the semiconductor industry and the extreme measures that the administration has seen fit to take within the last ten days.

And I would remind my colleagues that five years ago the semiconductor industry in the United States was a relatively healthy, fast developing industry, and now in some of our committees we are receiving the recommendations of the Secretary of Defense that we in effect subsidize our own domestic semiconductor industry so that we will have a core industry domestically necessary to support our defense requirements.

And that is an extraordinary transition in five years. Today we have a healthy construction industry in the United States, represented in every one of our States by the Associated General Contractors.

What we are concerned with, Mr. Chairman, is not just the issue of American firms participating in Japan or participating overseas, but we are concerned with the health of a domestic based industry and the inability of that industry to necessarily compete with Japanese contractors that come into the United States and build automobile plants, build other facilities, with bids that are negotiated rather than competitive.

And we have seen this, as I indicated in my figures, grow from $1.8 billion last year to this year it is estimated to be close to $4 billion. So we are also concerned with maintaining the viability of a healthy industry that is serving in each one of our States and providing a very competitive service.

And so they are also very interested in their own market here at home, and the matter of the Japanese coming in and Koreans and other countries and bidding public works projects may certainly be in our best interest. But by the same token, if it is not fair and we do not have the same opportunity overseas, why, then obviously we are in a weakened position.

So again, let me thank the chairman and wish you a good day.

Senator McCAIN. Mr. Chairman, could I make one point?

Senator FORD. Senator McCain.

Senator McCAIN. I certainly agree with the thrust of our colleague's remarks, but I do not view the recent action on semiconductors as extreme. Many of us come from a part of the country where that is an important part of our industry, and we view those actions as overdue and relatively mild.

But I certainly agree with the thrust of my colleague's remarks.

Senator FORD. Senator Kerry has arrived. Did you have any comment?

Senator EXON. Mr. Chairman, I just had one comment.

You draw an interesting parallel, Senator Murkowski. I think the facts of the matter are, with not only their ingenuity but with their financial muscle, the Japanese are moving very quickly in a whole series of areas. I thought it was interesting that you brought up the computer chip industry. Indeed, ten years ago the United States had a total monopoly on the high-tech microchips industry. Today we have approximately 15 percent or less of the market.

That is why months ago I began to lead the charge to get the administration to recognize that there is something more important to our overall security than allowing the Japanese to come in and take over our construction industry. When they get into high-tech microchips they are at the heart and soul of all of our programs that are coming down the pike.

I think it would have been a disaster had the administration not acted in the not overpublicized matter of Fujitsu trying to take over Fairchild. That would have just been one more nail in that economic coffin that is ours.

We like to talk about how we can compete. All we want is fair competition, and to a large extent this exists. However the Japanese are tremendously ingenious in how they get around these things. They make better use of their financial muscle and their international diplomacy muscle than we do.

Therefore, I think we are going to have to stand up and take some of the heat. That will result when we back the administration's latest two moves. Number one, they are finally knocking down the Fujitsu sale; and secondly, their more public actions in the measures that they took a week or so ago.

We have got a major problem on our hands, and I think you have contributed to the better understanding of that with your presentation this morning. Once again, I thank you.

Senator FORD. Thank you, Senator. We appreciate your attendance today. You have given us a lot of food for thought.

And to Senator Kassebaum, there is no need to apologize for being late. You improve this committee substantially. The next witness is Robert L. Donahue, Associate Administrator for Airports from the FAA, and he is accompanied by Dale McDaniel. We would like to hold it, if we can, Bob, to five minutes.

We need to move along as fast as we can this morning. The Senate is in session and I would like to complete this hearing before we are called back.

STATEMENT OF ROBERT L. DONAHUE, ASSOCIATE ADMINISTRATOR FOR AIRPORTS, FEDERAL AVIATION ADMINISTRATION, ACCOMPANIED BY DALE McDANIEL, DEPUTY ASSOCIATE ADMINISTRATOR FOR POLICY AND INTERNATIONAL AVIATION; AND PAUL GALIS, DIRECTOR OF PLANNING AND PROGRAMMING

Mr. DONAHUE. Thank you, Mr. Chairman. It is certainly a pleasure to be here this morning, and good morning to all of the subcommittee members.

I will read my prepared remarks, and if I run over five minutes I will stop and submit them for the record.

I welcome the opportunity to appear before the subcommittee today to provide you with an overview of the Federal Aviation Administration's airport improvement program. With me today is Dale E. McDaniel, Deputy Associate Administrator for Policy and International Aviation, and Paul Galis, who is the Director of Airport Planning and Programming.

Since 1982, the airport improvement program, commonly referred to as the AIP program, has proven an invaluable means by which money from the Airport and Airway Trust Fund has been made available for airport planning and capital development.

Since the inception of that program, we have seen dramatic and wholesale changes in the air transportation industry as a result of airline deregulation. To compete in the deregulated environment, air carriers began to adopt the connecting hub and spoke routing system and placed increased emphasis on schedule frequency to attract customers. In addition, approximately 75 new commercial air carriers were certified to provide scheduled air service, although many of these carriers are no longer providing service.

By the end of fiscal year 1986, there were 46 commercial air carriers engaged in scheduled air service, 16 more than existed prior to deregulation. In 1986, commercial air carriers enplaned 385.4 million domestic passengers, compared to 272.8 million passengers in 1982.

Domestic enplanements are forecast to total 654 million by 1998. Daily commercial air carriers conduct over 15,000 operations, transporting over one million passengers to and from 374 domestic airports. Commercial air carriers flew over 8.5 million hours in fiscal year 1986, an increase of ten percent over the previous year.

These statistics indicate a competitive and growing industry, which needs a safe and efficient air transportation infrastructure to provide increasing levels of service to the traveling public.

To facilitate the rapidly growing and changing aviation environment and industry growth, the AIP program has made available over $4 billion for airport-related capital development to enhance the safety, security, and capacity of the system.

By the end of this fiscal year, the total will reach $4.9 billion or 91 percent of our authorized funding of $5.3 billion for fiscal years 1982 to 1987. These AIP funds have been distributed in accordance with a statutory formula. Under that formula, not more than 50 percent of available funds are apportioned to primary airports, based on the number of enplanements.

Twelve percent is apportioned to the States and insular areas; $12.5 million is apportioned for Alaskan airports; and the remaining funds, totaling 36.5 percent of AIP funding, are discretionary funds.

The Federal share of total airport investment varies significantly from year to year. Since 1960, however, it has averaged approximately one-third of the total, less in the early years and more in recent years.

Further, the absolute value of Federal investment has risen substantially. From 1947 to 1960, Federal contributions averaged $140 million annually in 1985 dollars, and that had risen to $215 million annually between 1960 and 1970 and nearly $900 million annually between 1982 and 1987, the current authorization period.

Even if investments are adjusted to account for the significant growth in aviation activity, today's Federal investment is one and one-half to two times greater than during the 1960's.

Many important projects have been funded that contributed to imrovements in our national air transportation system. For example, AIP funds have been used for the construction of 22 new runways and the extension of another 35 runways at primary airports.

The construction of ten new reliever airports was made possible with AIP funds. New runways have been constructed with AIP funds at 166 airports and runways have been extended at another 259 airports. In addition to runway construction and extension, AIP funds have been used for safety and security projects required by FAA regulations, as well as aprons, taxiways, noise control projects, airport lighting, navigational aids, and so forth.

Primary airports, which include the 264 largest U.S. airports with air carrier service, received 62.9 percent or $2.5 billion of all AIP funds, with the remaining 37.1 percent or $1.5 billion used for projects at commercial service, general aviation, and reliever airports and for system planning.

Of the total amount distributed to date, 9.4 percent or $381.5 million of AIP funding has been obligated for noise-related projects, including noise compatibility planning, runway and taxiway development for noise compatibility, lighting for noise compatibility, noise barriers, landscaping to reduce noise, noise suppressing equipment, soundproofing, relocation assistance and land purchase for noise control purposes.

The vast majority of AIP funding for noise related projects has been used for projects at the larger or primary airports.

In short, Mr. Chairman, it has been our experience that the AIP program has contributed significantly to enhancing the safety, security, and capacity of the national air transportation system.

However, more needs to be done. Airport capacity or, more appropriately, the lack of capacity remains the number one problem facing aviation today. Since 1982, no new major airports have been built and only one is scheduled for the future.

We must increase the capacity at existing airports and build new airports if we are to meet the forecasted growth in aviation. More needs to be done.

The legislative proposal which was submitted by Secretary Dole to the Congress on February 12th provides the resources and the necessary flexibility to address these critical capacity needs and, indeed, targets capacity as a primary goal of our proposed new grant programs.

Our legislative proposal would provide $1.017 billion for each of the next two years to achieve priority capacity enhancements for the national airport system, by restructuring our grant program to permit more efficient use of grant funds.

Basically, we would reduce primary airport entitlements from 50 percent to 35 percent, and increase funds for capacity enhancement. By reducing entitlement funds, we propose to create a substantially larger discretionary program that is statutorily directed to capacity enhancement and safety/security concerns at primary or large commercial service airports.

Recognizing the dramatic growth in State government involvement in aviation, we are proposing to increase State apportionments to 22 percent to encourage voluntary State block grant programs. Finally, the proposal calls for a voluntary defederalization program in which any airport which wishes to forego Federal grants may do so.

As we look to the future, it is imperative in our view that the FAA be afforded the necessary resources and statutory ability to maintain its strong leadership role in the planning, development, and management of our national air transportation system.

There has been no diminishment of the critical Federal function to maintain a safe and efficient air transportation system which meets the needs of the American traveling public. I look forward to this subcommittee's support in working to address these critical capacity needs through our grant program.

Mr. Chairman, that completes my prepared statement. Mr. McDaniel, Mr. Galis and I would be pleased to respond to any questions which you or the members of the subcommittee may have.

Senator Ford. Thank you, Mr. Donahue.

Let me ask a couple of questions and then I will turn it over to my colleagues. The airport groups will testify later today that there are $3 billion in eligible airport grant applications on file at FAA, but they have not been funded because there is no money. Yet, there is a surplus in the trust fund.

What can be done to overcome this particular backlog?

Mr. Donahue. Mr. Chairman, you are absolutely correct that there is approximately $3 billion, it is closer to $3.8 billion, in unfunded applications at the present time. However, they have not all been prioritized, and I could break down that prioritization for you and give you a more explicit priority listing of those projects.

The funding has been adequate. We have taken care of all of the safety items that they have had, and our major priority items have been met.

Senator FORD. Are you saying that safety matters and priorities have been met, yet you have got almost $4 billion in backlog, but you will prioritize those and send us the list of those projects as they are eligible and the amount of funds requested?

Mr. DONAHUE. Yes, sir.

Senator FORD. If you would do that expeditiously, I would be grateful, Mr. Donahue.

[The following information was subsequently received for the record:]

PRIORITIZATION OF UNFUNDED AIP REQUESTS

The current balance of unfunded Airport Improvement Program (AIP) requests totals $3.8 billion. Of this amount $1.4 billion, or 37%, is for development at high activity large and medium hub primary airports and $0.6 billion, or 16% is for their reliever airports. The remainder is for requests at less active small and non-hub primary airports ($.7 billion or 19%), nonprimary commercial service airports ($.3 billion or 6%) and general aviation airports ($.8 billion or 22%).

The FAA continually evaluates these project requests and funds those of highest priority within available grant program limitations. This is an ongoing effort carried out by FAA regional offices using a national priority system.

In this system, highest priority is assigned to safety and security items required by regulation at all types of airports. Next, funding is directed to reconstruction of aircraft operating surfaces to preserve existing capacity and to assure operating safety. Development to bring airports up to FAA standards and to allow airports to upgrade facilities to meet immediate demands of changing aircraft types follows. Items to increase capacity of airports, such as high speed taxiways, new runways, and additional apron areas receive the next highest priority. The requirements of busier airports are always considered before those of less active locations. This process of applying priorities does not rule out funding for comparably lower activity locations, however, since legislative funding categories assure dedicated funds for all types of airports including general aviation airports with lesser activity levels.

Senator FORD. Now, let us get to the State block grant program. How would general aviation and small commercial service airports benefit from the State block grant programs? I have a feeling personally that this would create another layer of bureaucracy.

Mr. DONAHUE. I think that is probably a popular perception at the present time, Mr. Chairman. However, when one looks at the State departments of transportation, and the resources assigned to their bureau of aviation or division of aeronautics, we find that there is an awful lot of depth in most of the States. These resources can be an extension of the need that we have in FAA to reach out and to more adequately face the efficient improvement of our airports, whether they be general aviation airports or reliever airports or commercial service airports.

The States at the present time, almost all of them are doing what we call the 5010 program, where they do the inspection of all of the general aviation airports or the majority of the general aviation airports within that State. Those States, therefore, know the condition of those airports better than we in the FAA do.

Through a State block grant, States could prioritize the funds for the improvements of those airports much more efficiently and much more knowledgeably than we could in the FAA.

Senator FORD. Senator Danforth.

Senator DANFORTH. Thank you, Mr. Chairman.

Mr. Donahue, this question is directed to you or anyone else at the table who might be helpful. I introduced a bill some weeks ago which was designed to be a component of what will eventually be an authorization bill. And it set out a spending plan for airport improvements, that the cost in the bill, the number that we had in the bill, was $2.15 billion per year for five years.

And that is higher than other people are suggesting, but that number was based roughly on what we understand to be an analysis that has been made by FAA to be included in the national plan for an integrated airport system, which I believe is due this summer.

My understanding of the FAA estimate is that over the next ten years $24 billion would be required. So the number in my bill is slightly under the total amount that I understand is being proposed in this national plan for an integrated airport system.

Can you tell us, or any of the other members of your panel, about the estimate that has been done by the FAA in this regard?

Mr. DONAHUE. Yes, sir, I can give you part of the answer, and I would like to refer then to Mr. McDaniel. The present National Plan for an Integrated Airport System or "NPIAS" does show a need for about $18.3 billion.

There is a report now that has not yet gone forward to the Secretary, but will be coming to the Congress, which does, as I understand, show a need in the next ten year period of approximately $24 billion. Of course, $2 billion or $2.150 billion a year would represent almost 100 percent of that need.

Historically, the Federal funds have satisfied about one-third of the need of the dollars spent for those items which are otherwise Federally eligible for funding. The remainder has come from State and local sources and from the airports through their bonding capability.

Mr. MCDANIEL. I would just add to that, Senator, that in fact airport development has historically been a financial partnership which involves the Federal government, the local airport sponsor, and State governments. The estimates which have been made by the Administration in their bill would leave the Federal share virtually the same as the historic percentage.

In fact, the Federal share in the last 15 years has been gradually increasing in terms of total investment in airports. And one of the reasons that we have suggested some new and innovative ideas in dealing with the airport capacity problem is the realization that this problem will not be solved totally by an increase in the Federal funding. We need to have financial partners in all aspects of airport development.

Senator DANFORTH. Thank you, Mr. Chairman.

Senator FORD. Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

Mr. Donahue, I have a question about your statement concerning your legislative proposal, where you said you would reduce primary airport entitlement from 50 percent to 35 percent and increase funds for capacity enhancement.

What is the basis for this proposal?

Mr. DONAHUE. Senator, we have found historically that funds allocated by the 50 percent distribution were not always spent on the highest priority capacity items. They are spent for items which, if we in the FAA were prioritizing the work, would have been spent for other items.

We feel that by reducing entitlement funds to 35 percent we will still be supplying the commercial service airports with an amount of money necessary to meet, again, those items such as noise and capacity improvements. The 43 percent for capacity discretionary we feel is very, very necessary because of the hubbing that we see going on today.

We find that there are many airports out there who have the capacity, if you will, the land, the availability, to either extend runways or build new runways, but they find themselves on the back side of the income curve. They can project that when those improvements are in place—let us take for instance Nashville, Tennessee, that the operational increases at that airport will be sufficient to give them a dollar flow to take care of their capital needs out of airport revenue bonds.

But right now, up front they need capital dollars to put those improvements in place. That is the theory that we have for the 43 percent.

Senator MCCAIN. Later on this morning Mr. Bolger, the President of the Air Transport Association, will testify. In his prepared statement he makes a couple of points that I would like to give you an opportunity to respond to.

First is: "The Aviation Trust Fund has lost the trust of the aviation community and the Congress." He also says: "The NAS plan will be behind schedule, according to GAO estimates, on some critical programs by up to seven years at completion."

If the second statement is true, what do you intend to do about that?

Mr. DONAHUE. You are talking about the NAS plan. I cannot speak to the National Airways System Plan. I believe that you are going to have testimony on that tomorrow. I am not involved with it to any great extent. I do not know whether Mr. McDaniel has any thoughts on it or not.

Mr. MCDANIEL. Senator, I could comment generally on both questions. One is the loss of trust in the trust fund itself. I would suggest that any loss of trust is not derived from the management of the airport grant program, which has been basically funded at its full authorization level.

And so if there is any misunderstanding regarding the surplus which exists in the trust fund, it is not because we have not been faithful in terms of executing the grant program. The loss of trust would lie perhaps elsewhere.

Secondly, I would say that in the proposal that the Administration has put forward that there is a plan financially to begin drawing down that trust fund, and in fact to use it in a trustworthy way for improvement and operation of the aviation system.

During the two year period that has been proposed in the Administration's legislation, $7.1 billion in revenue would come into the trust fund during the period and $10 billion would be expended. The remainder is made up by a drawdown of the trust fund surplus and on interest that is earned by the trust fund surplus.

Secondly, with regard to the NAS plan, I think the indication that some projects would be seven years behind scheule refers to the ultimate—excuse me—the ultimate completion of certain of the longer range projects. It is true that funding during the first five years of the NAS plan has been approximately a billion dollars lower than the initial estimate to do the work.

There have been some slippages in schedules. I think that we are giving special attention now to the management during the period that the products are beginning to come on line to see that further delay is minimized. And I believe the experience in the first five years has well equipped the managers of that plan to keep it now close to on track, providing the financing is there to buy the equipment.

Senator McCAIN. Thank you, Mr. Chairman.

Senator FORD. Senator Kassebaum.

Senator KASSEBAUM. Thank you, Mr. Chairman.

I would like to follow up on a question that Senator McCain asked, I believe, and that was your analysis of the shift in funding for capacity-related improvements from about 50 percent to 83 percent, and a large portion of it being the discretionary funding now. And that is, you say, because of the hubbing priorities that you feel need to be handled with the discretionary?

Mr. DONAHUE. That is the reason, yes, ma'am. The 43 percent of the capacity discretionary would be distributed among the same airports that receive the 35 percent. It would address, number one, security and safety; and secondly, capacity increases, enhancement in the system. And I think that we all agree that capacity, increases in capacity are needed if we are to meet the ever-increasing number of enplanements and operations that we are getting.

Senator KASSEBAUM. Under the current allocations, we have not had that proportion of discretionary funding, is that correct?

Mr. DONAHUE. Yes, ma'am.

Senator KASSEBAUM. So the major portion of that shift from current allocation for the commercial service airports from around 55 percent to 80 percent is made up in discretionary funding?

Mr. DONAHUE. Yes, ma'am. Under the present Act we also take certain set-asides out of the discretionary fund. Of course, that also applies all the way down through the general aviation airports.

Senator KASSEBAUM. Well, in the general aviation and reliever airports they have had a certain amount of funding set-aside, as you say, and that is now eliminated by the block grant approach, is that correct?

Mr. DONAHUE. Yes, ma'am. We have had a 12.5 percent set-aside for just distribution among the States based on area and population. We have increased that to 17 percent, and we feel that that additional 4.5 percent more than approximates that amount which they have previously received out of discretionary funding.

Senator KASSEBAUM. Well, I have been a supporter of the block grant approach, but I think that as it is outlined now, there are a number of conditions that have to be met to be eligible for a block grant.

Have you given any thought to how many States will be eligible? Are you assuming all 50 might be?

Mr. DONAHUE. Well, I am assuming personally, having had six and a half years as the State Director of Aeronautics in Illinois, I believe that there are probably 25 States out there that have a State program which could adapt to a State block grant program within a year.

The remainder, and the National Association of State Aviation Officials (NASAO), did make a survey of all of their State members and they found that almost 100 percent of them would, number one, be interested in a State block grant; and that they had varying degrees of expertise, but all of them had the ability, they felt, to administer the State block grant program, whether they could do it within the airport organization itself within the States or if they had to rely upon the expertise out of the Department of Transportation or the Highway Department.

Senator KASSEBAUM. Well now, let us say in those 25 States, if they get the block grant award they will be making the decision on what percentage will go to general aviation airports, reliever airports, or noise abatement, and so forth?

Mr. DONAHUE. Yes, ma'am. There would certainly be noise abatement.

Senator KASSEBAUM. And in the other States, you will still be allocating the funds, is that correct?

Mr. DONAHUE. Yes, ma'am. If the States, either because of statutory requirements where they cannot join the block grant without some legislative change or because they just do not have the infrastructure to do it, then the FAA would continue to handle that number of dollars as we have in the past.

Senator KASSEBAUM. But you then will have the discretion to use the funds where you see fit in those States that will not be under the block grant program, that is you will not be subject to the set-aside formulas in the current legislation, is that correct?

Mr. DONAHUE. Yes, ma'am.

Senator KASSEBAUM. If I could ask one final question. You talked about the hub and spoke pattern, which of course has become the centerpiece of deregulation in many ways. Some significant problems are occurring, I think, as the hubs are adjusting to their traffic.

If you had to analyze what would be top priority in assisting with the improvement of a hub, what would you list? Additional air traffic controllers, additional runway space? What in your view should be the top priority?

Mr. DONAHUE. Well, understanding that I am jaded and somewhat of an airport expert, of course, I would like to see the dollars spent on the airport. I think that, whatever we may do in the airways—and I think we all understand it very, very well—that there must be a parallel movement of improvements on the airports.

The more people we put into the air, they have to come off of a runway, and when they get to the airport they have to get back onto a runway. If we do not expand airport capacity, then additional airplanes in the air are just going to have to hold on the ground or hold in the air.

Therefore, just to answer your question, again subjectively, we need to have some dollars in airports.

Senator **Kassebaum**. Thank you very much, Mr. Donahue.

Senator **Ford**. Senator Kerry.

Senator **Kerry**. Thank you, Mr. Chairman.

Mr. Donahue, the Danforth bill, S. 679, has a proposal, for about $350 million for noise reduction. The administration proposal for all discretionary activities I think is about half that, with a minimum allocation for noise programs. It would drop a specific minimum allocation for noise reduction.

I am new to all of this, but I certainly have followed our airport expansion efforts and efforts to even move into certain reliever airports in the context of my State. It seems to me that one of the essential ingredients to that expansion, et cetera, is the ability to gain public support in communities and to have noise reduction.

Therefore, I wonder how you square the administration's approach on that with the Danforth proposal and the whole notion of the importance of noise reduction.

Mr. **Donahue**. Senator Kerry, while we have not made a set-aside for noise in the bill, on the other side of that coin, all of the dollars that we have proposed for the airport improvement program would have a high eligibility for noise projects.

So we have not set aside a specific amount.

Senator **Kerry**. But there will be half the amount of money available for everything.

Mr. **Donahue**. No, sir. If that noise—particularly if you are talking about a commercial service airport, the 35 percent that we have in the formula distribution, plus the 43 percent that we provide for capacity discretionary, any part of that is available for noise.

Senator **Kerry**. However, not specifically allocated. Do you not think noise should have a specifically allocated amount? Obviously you do not, but I am asking why you do not.

Mr. **Donahue**. We have easily spent more than that eight percent set-aside for noise projects. We think that the airport sponsor is more aware of his needs within his community to satisfy the constituency as far as noise is concerned, and we would encourage each airport sponsor to look at that situation within his area and determine how much of his money out of the 35 percent should be spent on noise or how much more he is going to need out of the 43 percent for noise.

Noise would receive a very high priority, especially that noise which by its elimination is going to have a significant increase and enhancement of airport capacity.

Senator **Kerry**. Let me ask a follow-up question on that matter. Since we are going to have these competing interests, and I can certainly think of airports where people feel they have got to do both or all and do not have the money. I know my staff has met with you and talked, for instance, about the Worcester Airport and that concept, where there are competing desires.

This question is probably a very elementary question, but please bear with me. I would like to hear you say and perhaps learn for the record why it is, when we have a $5.63 billion surplus in the trust fund and people are paying eight percent on their tickets and 12 and 14 cents on a gallon of fuel, both designed to make their lives better in the process of using these airports, why are we not doing that?

Why are we not raising the authorization level in order to do more? Isn't that what the trust fund was set up for?

Mr. DONAHUE. Well, to look at the administration's proposal overall, the funding levels that are contained within F&E, RE&D, AIP, and O&M, the total of that is an amount that, as Mr. McDaniel explained earlier, that would bring down those balances in the trust fund.

Any overspending, we feel, in any one item, for instance AIP, would only tend without reductions in other elements of the FAA budget, would compromise those other elements.

Senator KERRY. I am not sure I follow. The other elements of the FAA budget are on budget, are they not?

Mr. DONAHUE. Yes, sir.

Senator KERRY. This is not on budget. This is a trust fund. So they do not really affect each other.

Mr. DONAHUE. No, but what I was talking about, Senator, was that if the total—if the bottom line of the administration proposal is close to $5 billion—Dale?

Mr. MCDANIEL. Yes, if I could, Senator Kerry. A number of items in FAA's budget are actually paid from the trust fund, including the airport grant program that we are now talking about. Facilities and equipment, which is the NAS plan modernization, we are in the middle of the ten year program to replace obsolete equipment. The research, engineering, and development program—these are all paid 100 percent from the trust fund.

There has also been a portion of the operational expenses also paid from the trust fund for operating these equipments.

Senator KERRY. My time is up. If I could just ask one question. How much does that bring the total surplus down to if you account for these other things you are saying? Where does that leave the surplus number?

Mr. MCDANIEL. At the end of—I will give you two answers, one at the end of two years and one at the end of five years.

At the end of two years, by the proposal made by the Administration the surplus of $5.6 billion would be reduced to $4.3 billion. If similar authorization levels were projected for the next three years for facilities and equipment and slightly higher levels for airport grants, the balance at the end of five years would be approximately $1 billion.

Senator KERRY. And that is based on current revenues or projected revenues growth?

Mr. DONAHUE. Projected revenues, yes, sir.

Senator KERRY. Thank you, Mr. Chairman.

Senator FORD. Thank you.

Gentlemen, we appreciate your testimony this morning. There may be questions by the members of the committee and others, and we hope that you respond to those in writing as expeditiously as possible.

The next witnesses will be Larry Hedrick, President of the American Association of Airport Executives, accompanied by Mr. Charles M. Barclay, Executive Vice President; and Robert Aaronson, First Vice Chairman, Airport Operators Council, and he will be accompanied by J. Donald Reilly, Executive Director/Secretary General.

Now, Mr. Hedrick, will both of you be making a statement or one will be making a statement for both?

Mr. HEDRICK. We will both be making a statement.

Senator FORD. Can we get it on five minutes apiece?

Mr. HEDRICK. Yes, sir.

Senator FORD. Fine. Let us have at it.

STATEMENTS OF LARRY HEDRICK, PRESIDENT, AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES, ACCOMPANIED BY CHARLES M. BARCLAY, EXECUTIVE VICE PRESIDENT; ROBERT AARONSON, FIRST VICE CHAIRMAN, AIRPORT OPERATORS COUNCIL INTERNATIONAL, ACCOMPANIED BY J. DONALD REILLY, EXECUTIVE DIRECTOR/SECRETARY GENERAL

Mr. HEDRICK. Mr. Chairman, I am Larry Hedrick, President of the American Association of Airport Executives and General Manager of Airports, Buffalo, New York, Niagara Frontier Transportation Authority.

Very simply, Mr. Chairman, the aviation trust fund is broken and it needs to be fixed. Presently the trust fund generates $3.5 billion per year in tax revenues, while the trust fund surplus is growing by more than $1 billion per year.

The Federal government is charging airline passengers an administrative laundering fee of one third every year for the privilege of sending their money to Washington. Something is clearly broken from the passengers' perspective.

Airports are faced with huge capital development needs, as illustrated by both our own surveys and the projections of the FAA. These airport development needs result in large measure from the success of airline deregulation. Since 1978, domestic passengers have grown from 246 million to 405 million last year.

But the success of low fares and increased competition among the airlines has caused problems for our nation's airports. New passengers require new or expanded facilities at originating, connecting, and destination airports, or else all passengers are faced with delays.

Consdering that aviation trust fund moneys are dedicated to capital improvements in the airport and airways system, and as passenger volumes grow so does revenue to the trust fund, one might think there should be a symbiotic relationship between passenger traffic growth and system capacity.

Indeed, that was precisely the aviation trust fund's original premise. But instead, we have found an unproductive correlation between general treasury IOU's to the trust fund and passenger volumes, while airport capacity projects are delayed to meet funding levels are delayed to meet funding levels tied to Federal budget policy.

In other words, we have constructed a system where airport capacity needs are tied to passenger volume, passenger taxes are tied to Federal revenue needs, and airport development funds are tied to Federal fiscal policy, which has an unconnected but inverse relationship to passenger volumes.

From the airports' perspective, the trust fund is broken. Airline deregulation has presented airport operators and executives with difficult new challenges, but we welcome new problems of coping with larger numbers of passengers systemwide and accommodating an entirely new economic group of travelers.

We cannot, however, meet these challenges with pre-deregulation attitudes toward airport funding levels or by expecting passengers to pay twice for trust fund surpluses disguised as capital development taxation and for airport capital construction through a secondary system of local airport fees and charges.

The administration proposal offered to the committee does not provide solutions to this problem. That proposal continues to advance the administration's historic view that paying to operate the existing system is a higher priority for trust fund dollars than increasing the system's safety and capacity in proportion to traffic increases. Airport officials disagree.

The administration proposes to turn almost a quarter of the airport grant program over to States, for their heterogeneous administration through an additional layer of bureaucracy. Airport officials disagree.

The administration argues that airports will wish to defederalize and charge passengers local taxes, even though Federal passenger tax levels will stay the same and the airport grant program will be shrunk for each airport that defederalizes. Airport officials disagree.

The administration proposal represents the status quo in airport funding levels and in the trust fund's relationship to the Federal budget process. It is two more years of business as usual. Airport officials strongly disagree with the administration's band-aid approach to a broken system.

To further underscore our concern with the administration's proposal, we have attached several graphs to our statement showing the lack of relationship between the administration's future funding levels and system needs. Mr. Chairman, Robert Aaronson, representing AOCI, will explain our views on airport capital development needs and the detail of our proposals.

Thank you.

Mr. AARONSON. Good morning, Mr. Chairman and members of the subcommittee.

It should be readily apparent, given the current state of air transportation in this country, that Federal funding of airports during the past five years has not developed enough airport capacity to keep pace with growing air traffic demand.

At present, over $3 billion in eligible airport construction grant applications are on file with the FAA, ready but unable to be funded. In addition, between 1982 and 1986 the FAA has turned down requests for eligible AIP projects worth almost $10 billion.

Sometimes, as the individual responsible for administering the airports serving the greater New York area, I think that that whole $10 billion of applications that could not be satisfied were ones that I submitted, reflecting our enormous development needs in the New York area. But of course, I am only joking.

All the benefits of increased air space capacity derived from the NAS plan will not be fully realized unless we also increase airport capacity to accommodate it. AOCI's forecast of airport capital development needs over the next five years, 1988 to 1992, reveals serious shortcomings in airport development.

Unless the Federal commitment to airports is re-assessed and substantially increased, our projections, based on capital improvement plans identified by our member airports, show a total need of over $29 billion in developing financing for airport safety, capacity, and noise mitigation projects in the next five years.

Commercial service airports alone will need approximately $23 billion. Airport congestion and capacity constraints due to noise considerations are the two most serious problems facing the aviation system today. Aircraft noise is the biggest environmental constraint today on the capacity of the air transportation system.

Accordingly a new airport grant program must focus on these problems and provide the resources necessary to resolve them. To those who will say the Federal government cannot afford a larger airport grant program, we say the Federal government has a moral obligation to spend the users' dedicated funds it has already collected and will continue to collect.

It is a small price to pay when one weighs the $3.2 billion annual cost of delays to airlines, passengers, and shippers against the trust fund surplus.

AOCI and AAAE have together developed a proposal which realistically addresses today's airport capacity and safety problems and anticipates tomorrow's growth. Our proposal has been developed out of airport operators and executives' experience and frustrations with the current program. It is based on three basic premises:

First, our new airport and airway trust fund program will start out in fiscal 1988 with a projected $5.7 billion surplus of unspent user taxes. Reauthorization legislation must remedy the underfunding problem and assure that user tax revenues will be fully spent for their intended purpose.

Second, the current aviation user taxes, along with the trust fund surplus, are sufficient to support higher spending levels for aviation programs and should be extended at their present levels.

And third, the trust fund's uncommitted surplus must be drawn down by increased spending on its capital programs.

Our joint position consists of several interrelated elements which are intended to provide higher authorization and funding levels commensurate with airport development needs, while maintaining the historical Federal share, roughly one-third as you heard earlier, of total development costs, also, to provide incentives for full funding for the trust fund programs and disincentives for appropriating below the authorization levels, and provide a supplementary funding source—that is, a passenger facility charge—for airport sponsors in the event the Federal government fails to fully fund AIP at necessary levels.

We are not advocating defederalization or defunding of airports. What we are advocating is a supplement to and not a replacement for Federal grants in the event of underfunding.

I would like to now briefly outline a few of the specifics in our proposal, and of course we are submitting the full text of our proposal for the hearing record. First, we propose that the airport improvement program be reauthorized for five years and funded at $1.8 billion in the first year, with annual increases of $100 million.

That level would include a basic $1.1 billion program of entitlement and discretionary grants similar to the current AIP program, but with some allocation changes to make more funds available to important relievers and airports having cargo traffic.

We also propose having two new discretionary funds of $350 million each, one devoted to airport capacity projects and one for airport noise mitigation projects. In addition to the $1.8 billion AIP program, we believe a $500 million revolving loan funds should be established within the Airport and Airway Trust Fund to provide low interest loans to airport sponsors for land acquisition for appropriate airport purposes, including expansion projects, noise buffers, compatible land use, and new airports.

On the other programs that are funded from the trust fund, which were discussed just a few moments ago by the preceding witnesses, we would recommend that the F&E program be funded at $1.5 billion a year to continue the timely implementation of the NAS modernization. We would support the research, engineering and development program being funded at $200 million a year, with a $25 million special amount dedicated for airport capacity R&D in a separate budget line item.

And Don Reilly will follow me in just a moment with just a few comments on that very important effort.

On the FAA operations and maintenance funding, we believe the penalty clause in the existing legislation should be continued and strengthened to ensure the trust fund commitments for AIP and F&E are met before operations and maintenance.

And we also believe that a trust fund surplus trigger mechanism should be included, so that aviation user taxes are automatically suspended or reduced if the uncommitted trust fund surplus exceeds one billion dollars by fiscal 1991 or 1992.

Now, Mr. Chairman, while we are appearing in this hearing and you indicated in your opening statement today a support for higher funding levels for these critical programs, I must note with very great concern that your colleagues on the Budget Committee appear to be heading in an entirely different direction at almost this precise time by considering imposing a freeze during fiscal year 1988 on all of these aviation trust fund programs at the fiscal 1987 level.

So we do urgently bring that concern to your attention and hope that you will be able to work with your colleagues on that.

We very much appreciate this opportunity to present our views and, as mentioned, I would like to have Don Reilly add just a few words on the airport R&D needs.

Senator Ford. Don, make it very fast, because he went over his time limit.

Mr. REILLY. I certainly will, Mr. Chairman. And in recognition of the expired time, let me just say, Mr. Chairman, that last year the industry task force on airport capacity improvement was given $5.5 million for R&D. Great gains have been made from the use of these moneys in trying to expedite some shorter term capacity enhancements to airports.

This industry capacity task force has continued in force this year, with the help of FAA. We have a full range of near term capacity improvement items that need simulation, demonstration, and we need airport R&D money of $25 million.

We have documented that in the back of our statement. We are now working up with FAA how that $25 million would be precisely expended, and we will submit this for the record within the next week, Mr. Chairman.

Thank you very much for allowing me that time.

[The statement follows:]

JOINT TESTIMONY OF THE AIRPORT OPERATORS COUNCIL INTERNATIONAL AND THE AMERICAN ASSOCIATON OF AIRPORT EXECUTIVES

Mr. Chairman, I am Larry Hedrick, president of the American Association of Airport Executives (AAAE) and general manager of airports, Buffalo, New York. Testifying with me on behalf of this joint position is Mr. Robert J. Aaronson, aviation director of the Port Authority of New York and New Jersey and first vice chairman of the Airport Operators Council International (AOCI). Accompanying us are J. Donald Reilly, executive director/secretary general of AOCI, and Mr. Charles M. Barclay, executive vice president of AAAE.

Our organizations represent jointly the airports which enplane more than 99 percent of the passengers in the United States and more than 1,200 airport executives responsible for managing airports of all sizes throughout the country. Combined, our organizations represent a consensus of opinions from all categories of airports.

We are pleased to be providing a unified position on behalf of airports for the reauthorization of the Airport and Airway Improvement Act of 1982. But to preface our recommendations for a creditable trust fund program for the next half-decade, we wish to review the fund's past performance from the airports' perspective. Very simply, Mr. Chairman, the Aviation Trust Fund is broken, and it needs to be fixed. Presently, the Trust Fund is generating $3.5 billion per year in tax revenues while the Trust Fund surplus is growing by more than $1 billion per year.

AIRLINE PASSENGERS ARE BEING OVERTAXED OR UNDERSERVED REGARDING AIRPORT CAPACITY

The Federal Government is charging airline passengers an administrative "laundering fee" on one-third every year for the privilege of sending their money to Washington. Something is clearly broken from the passenger's perspective.

Airports are faced with huge capital development needs as illustrated by both our own surveys and the projections of the FAA. These airport development needs result in large measure from the success of airline deregulation. Since 1978, domestic passengers have grown from 246 million to 405 million last year. But the sucess of low fares and increased competition among airlines has caused problems for our Nation's airports. New passengers require new or expanded facilities at originating, connected, and destination airports, or else all passengers are faced with delays.

AIRPORT CAPACITY NOT GROWING IN PROPORTION TO PASSENGER TRAFFIC AND TRUST FUND REVENUE

Considering that Aviation Trust Fund monies are dedicated to capital improvements in the airport and airways system, and as passenger volumes grow so does revenue to the Trust Fund, one might think there should be a symbiotic relationship between passenger traffic growth and system capacity. Indeed that was precisely the Aviation Trust Fund's original premise. But instead, we have found an unproductive correlation between General Treasury IOU's to the Trust Fund and passenger volumes, while airport capacity projects are delayed to meet funding levels tied to Federal budget policy.

In other words, we have constructed a system where airport capacity needs are tied to passenger volume; passenger taxes are tied to Federal revenue needs; and airport development funds are tied to Federal fiscal policy—which has an unconnected but inverse relationship to passenger volumes.

From the airports' perspective the Trust Fund is broken. Airline deregulation has presented airport operators and executives with difficult new challenges. But we welcome the problems of coping with larger numbers of passengers system-wide and accommodating entirely new economic groups of travelers. We cannot, however, meet these challenges with pre-deregulation attitudes toward airport funding levels, or by expected passengers to pay twice: for Trust Fund surpluses (disguised as capital development taxation) and for airport capital construction through a secondary system of local airport fees and charges.

We realize that we are not telling this subcommittee anything it doesn't know about the past performance of the Aviation Trust Fund. But we wish to encourage the subcommittee to examine carefully the testimony of all user groups and see if a common thread is not unanimous aviation industry agreement that "the trust fund is broken and needs to be fixed". Certainly there are differences in recommended solutions, but we believe the important message is that the status quo is not acceptable.

ADMINISTRATION PROPOSAL FOR AIRPORT CAPACITY IS TOO LITTLE AND TOO SHORT-TERM

The administration proposal offered to the committee does not provide solutions to this problem. That proposal continues to advance the administration's historic view that paying to operate the existing system has a higher prority for Trust Fund dollars than increasing the system's safety and capacity in proportion to traffic increases. Airport officials disagree.

The administration proposes to turn almost a quarter of the Airport Grant Program over to States for their heterogeneous administration through an additional layer of bureaucracy. Airport officials disagree.

The administration argues that airports will wish to defederalize and charge passengers local taxes even though Federal passenger tax levels will stay the same and the Airport Grant Program will be shrunk for each airport that defederalizes. Airport officials disagree.

The administration proposal represents the status quo in airport funding levels and in the Trust Fund's relationship to the Federal budget process. It is two more years of business as usual. Airport officials strongly disagree with the administration's "band-aid" approach to a "broken" system.

To further underscore our concern with the administration proposal, we have attached several graphs to our statement showing the lack of relationship between the administration's future funding levels and system needs.

AOCI/AAAE PROPOSAL WOULD MAKE TRUST FUND WORK AS CONGRESS INTENDED

We hope the committee will find merit in our joint proposal for a better Trust Fund Program. It is a program based upon the premise that we should not repeat mistakes made in the past, nor should we pretend that the Federal budget process will fix itself and begin to recognize our revenues together with our expenditures as a dedicated fund. The joint airports program is designed to try and remedy the government's past mistakes with this Trust Fund.

Mr. Chairman, Robert Aaronson representing AOCI will explain our views on airport capital development needs and the details of our proposal.

AIRPORT CAPITAL DEVELOPMENT NEEDS

While the current AIP Program has been beneficial to airport development, it nevertheless has been inadequate in providing the airport infrastructure necessary to meet current air traffic demands. It should be readily apparent given the current state of air transportation in this country that Federal funding of airports during the past five years has not developed enough airport capacity to keep pace with growing air traffic demand.

At present, over $3 billion in eligible airport construction grant applications are on file with the FAA—ready, but unable to be funded. In addition, between 1982 and 1986 the FAA has turned down requests for eligible AIP projects worth almost $10 billion. All the benefits of increased airspace capacity derived from the NAS plan will not be fully realized unless we also increase airport capacity to accommodate it.

AOCI's forecast of airport capital development needs over the next five years, 1988-1992, reveals serious shortcomings in airport development unless the Federal commitment to airports is reassessed and substantially increased. Our projections, based on capital improvement plans identified by our member airports, show a total need of over $29 billion in development financing for airport safety, capacity and noise mitigation projects in the next five years. Commercial service airports alone will need approximately $23 billion. The tremendous safety and capacity needs of the airport system are further demonstrated by the FAA's forthcoming National Plan for Integrated Airport Systems (NPIAS), in which the FAA estimates total AIP-eligible airport needs of $24.3 billion over the ten-year period 1986-1995. Large primary commercial service airports account for $17 billion of the total. According to the FAA, 72 percent of total development is related to increasing capacity in the airport system to handle growing passenger volumes and aircraft operations. The next 17 percent in required airport improvements is attributable to bringing existing airports up to current design standards and the remaining 11 percent is needed to maintain the existing system.

A comprehensive assessment of airport system needs is critical to long-range planning and development of a balanced airport system. We are concerned that the administration's proposal only calls for a report on the capacity and operational characteristics of the airport system after two years, but does not explicitly require a useful, long-range, detailed national airport system plan, as the current NPIAS provides. We believe such a plan should be required in this legislation. Future plans should also more aggressively address the inevitable need for new airports in this country, to supplement or replace congested airports that, for one reason or another, cannot be expanded significantly. Only the Federal Government is in a position to take the essential long-range initiative of identifying where and when new airports will be needed to serve metropolitan areas constrained by congested airports.

THE SHORT RANGE FIX TO OUR CAPACITY AND DELAY PROBLEMS

In light of the unacceptable delay problems we have all witnessed or personally experienced, there should be no doubt that Federal funding of airports under the present program has been inadequate. We, therefore, believe the administration's proposal to maintain the Airport Grant Program at the current $1 billion level, for only two years, is unacceptable. Maintaining the status quo will not solve the critical capacity problems facing the system, nor relieve passenger delays, inconvenience and frustrations, especially given projections that traffic will grow five percent annually over the next ten years to over 600 million passengers. We must now plan and provide a new air transportation infrastructure program that will respond to the current problems and future needs into the 21st century.

In 1985, 17 air carrier airports were seriously congested, according to the FAA. These airports constitute 43 percent of total enplanements nationally. By 1990, 13 additional commercial service airports will be congested, and another 31 airports are expected to become congested unless their capacity is increased. Between 1984 and 1996, the FAA projects that air traffic operations will grow 62 percent.

According to U.S. DOT/FAA's Airport Capacity Enhancement Plan (1986): "At many airports, the projected traffic levels cannot be accommodated without creating or adding to congested conditions. As air traffic expands over the next decade, it seems inevitable that airport users will experience longer and more costly delays unless capacity improvements are made."

Airport congestion and capacity constraints due to noise considerations are the two most serious problems facing the aviation system today. Aircraft noise is the biggest environmental constraint today on the capacity of the air transportation system. Accordingly, a new Airport Grant Program must focus on these problems and provide the resources necessary to resolve them.

To those who will say the Federal Government cannot afford a larger Airport Grant Program, we say the Federal Government has a moral obligation to spend the users' dedicated funds it has already collected and will continue to collect. It is a small "price" to pay when one weighs the $3.2 billion annual cost of delays to airlines, passengers and shippers against the trust fund surplus. The cost to our gross national product would easily equal this amount. The aviation users who, through the aviation trust fund, in fact pay for the airport and airspace improvements, demand higher spending for airports.

Aviation users have paid and continue to pay into the trust fund more than enough to cover the immediate safety and capacity projects that could and should be funded now. The trust fund's uncommitted surplus and its growing user tax revenues are clearly sufficient to support higher spending for airport development and other trust fund capital programs.

We must realize that our efforts here today to convince Congress to spend all available trust funds annually is just to repair the inefficiencies of the existing system. We then must begin the process of developing a master plan for the air transportation infrastructure for the 21st century along with the new funding mechanisms that will be required.

AOCI/AAAE JOINT AIP REAUTHORIZATION PROPOSAL

AOCI and AAAE have together developed a proposal which realistically addresses today's airport capacity and safety problems and anticipates tomorrow's growth. Our proposal has been developed out of airport operators' and executives' experience and frustrations with the current program and is based on the following premises:

1. The aviation trust fund is not broke—it is broken. A new airport and airway trust fund program will start out in FY 1988 with a projected $5.7 billion surplus of unspent user taxes. Reauthorization legislation must remedy the underfunding problem and assure that user tax revenues will be fully spent for their intended purpose.

2. The current aviation user taxes—along with the trust fund surplus—are sufficient to support higher spending for aviation programs and should be extended at present levels.

3. The trust fund's uncommitted surplus must be drawn down by increased spending on its capital programs; otherwise user taxes should be temporarily suspended. It would be unconscionable to allow the surplus to grow further at the expense of needed capital improvements.

Our joint position consists of several interrelated elements which are intended to:

1. Provide higher authorization and funding levels commensurate with airport development needs, while maintaining the historical Federal share (roughly one-third) of total development costs;

2. Provide incentives for full funding of the trust fund programs and disincentives for appropriating below the authorization levels; and

3. Provide a supplementary funding source—that is, a passenger facility charge (PFC)—for airport sponsors in the event the Federal Government fails to fully fund AIP at necessary levels.

I would now like to briefly outline our proposal. We will submit the full text of our proposal for the hearing record.

1. AOCI and AAAE propose that the Airport Improvement Program be reauthorized for five years (fiscal years 1988-1992) and funded at $1.8 billion in the first year, with annual increases of $100 million. That level would include a basic $1.1 billion program of entitlement and discretionary grants, similar to the current AIP program but with some allocation changes to make more funds available to important relievers and to airports having heavy cargo traffic. We also propose establishing two new discretionary funds of $350 million each—one devoted to airport capacity projects and one for airport noise mitigation projects.

As we have noted, capacity and noise problems are the biggest challenges facing airport sponsors today and are a serious constraint on the national air transportation system. These two dedicated funds should allow the DOT Secretary to target funds to airports experiencing the most serious capacity or noise problems.

2. In addition to the $1.8 billion AIP program, we believe a $500 million revolving loan fund should be established within the airport and airway trust fund to provide low-interest loans to airport sponsors for land acquisition for appropriate airport purposes, including expansion projects, noise buffers, compatible land-use and new airports.

3. A full funding trigger mechanism should be enacted wherein the Federal prohibition of passenger facility charges (PFC), or "head taxes", would be automatically and permanently repealed if in any year the amount appropriated for AIP is less than the authorized level.

We firmly believe that either the Federal Government should live up to the commitments it makes when it collects passenger taxes, or give airport sponsors the wherewithal to finance necessary improvements through a locally-imposed passenger charge. I want to make clear, however, that we are not advocating defederalization or "defunding" of airports. The passenger facility charge should be used as a supplement to—not a replacement for—Federal grants, when the Congress underfunds the Airport Grant Program.

Airport needs are so great that we cannot afford an "either/or" dilemma as the administration proposes in its defederalization plan, forcing airports to choose between Federal grants or a PFC. It is all funding from passenger to accommodate passengers demand for facilities.

4. A trust fund surplus trigger mechanism should be included so that aviation user taxes are automatically suspended or reduced if the uncommitted trust fund surplus exceeds $1 billion in FY 1991 or 1992.

5. To avoid construction delays, airports should receive AIP entitlement funds at the beginning of each fiscal year by certifying compliance with all grant requirements. Further, airport sponsors should be permitted to proceed with development projects in advance and remain eligible for AIP reimbursement.

6. The administration's State block grant proposal should not be included in a new AIP program.

7. Language should be included in the legislation protection airport proprietary rights to preserve local control over airport operations and environmental matters.

8. The FAA's facilities and equipment (F&E) program should be funded at $1.5 billion per year to assure timely implementation of NAS plan modernization.

9. The research, engineering and development (R&D) program should be funded at $200 million per year, and $25 million should be dedicated for airport capacity research and development through a separate budget line item.

10. The FAA operations and maintenance (O&M) penalty clause should be continued and strengthened to ensure that trust fund commitments for AIP and F&E are met before O&M.

We ask you, Mr. Chairman, and the members of this subcommittee to consider our proposal. We believe it addresses the past problems with the program, today's realities and needs, and if implemented will help develop a future airport and airway system that our Nation needs and demands.

Despite the good intentions of the Congress and the administration in the 1982 authorization of the current program, that program has fallen seriously short of its objective. We strongly urge the Congress not to allow the past to be repeated. If we fail to address and remedy those shortcomings now, while we have this opportunity, we will be plagued for years to come with an inadequate air transportation system. We don't think anyone wants that to happen.

Mr. Chairman, I would like to take this opportunity to highlight two critical aspects of the legislation on behalf of the Port Authority of New York and New Jersey.

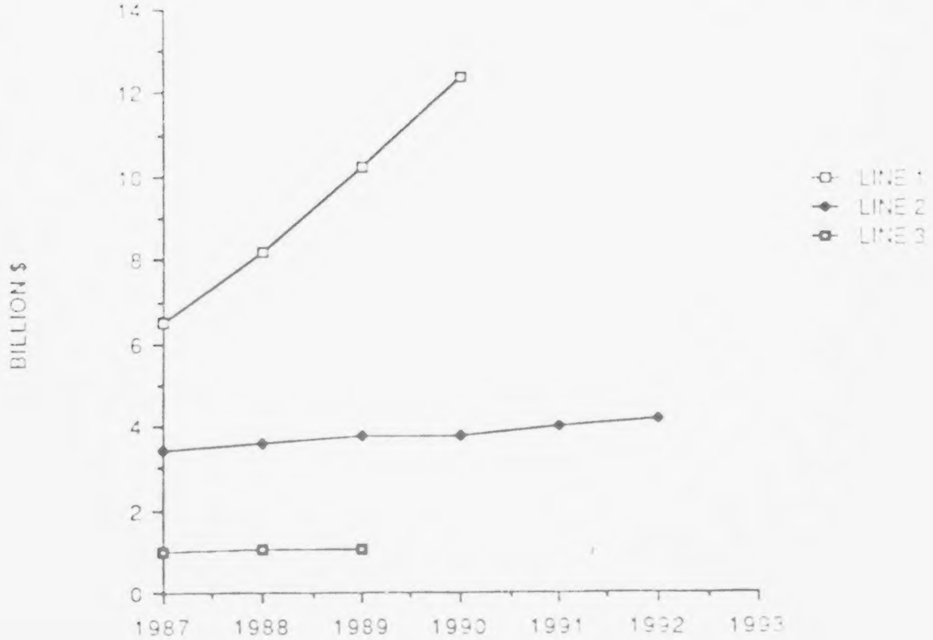
More people are impacted by aircraft noise in the New York-New Jersey region than anywhere else in the Nation. However, unless section 104(C)(1) of the Aviation Safety and Noise Abatement Act of 1979 (P.L. 96-193) is amended to give the Secretary of Transportation discretion to authorize grants for noise abatement projects to airports that have declined to participate in FAA's part 150 program but have prepared a noise abatement plan which has been approved by the Secretary, the port authority will not benefit from the proposed noise mitigation fund.

The AOCI/AAAE joint position recommends increasing the maximum apportionment per airport to $16 million. This is important if the port authority is to receive the full benefit of the formula. Our 1987 apportionment for Newark International Airport is $10.9 million and at Kennedy it is $10.5 million. Based on projected passenger growth over the next five years, these airports will be entitled to receive more than $12.5 million.

Mr. Chairman, thank you for this opportunity to present our views before you. We look forward to working with you and the subcommittee members to develop the best possible Airport and Airway Program to fix the present system and start formulating congressional policy necessary to meet the needs of air transportation in the 21st century—only 13 years away.

Thank you. We would be happy to respond to any questions you may have.

GRAPH 1

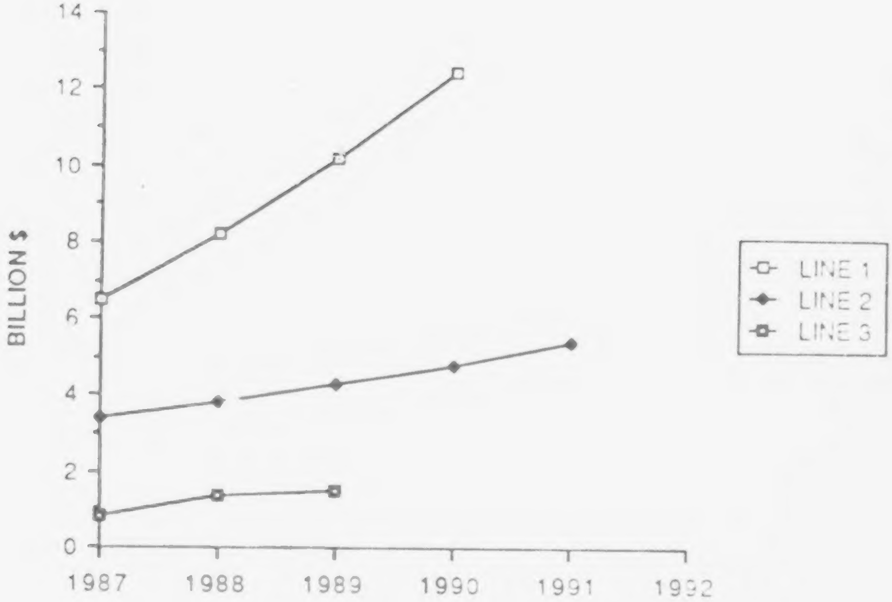


Line 1 - GAO Est. of Unused Trust Fund Balance

Line 2 - Eligible Capital/Noise Airport Costs (Source - AOCI)

Line 3 - DOT's AIP Proposal, 1987-89

GRAPH 2

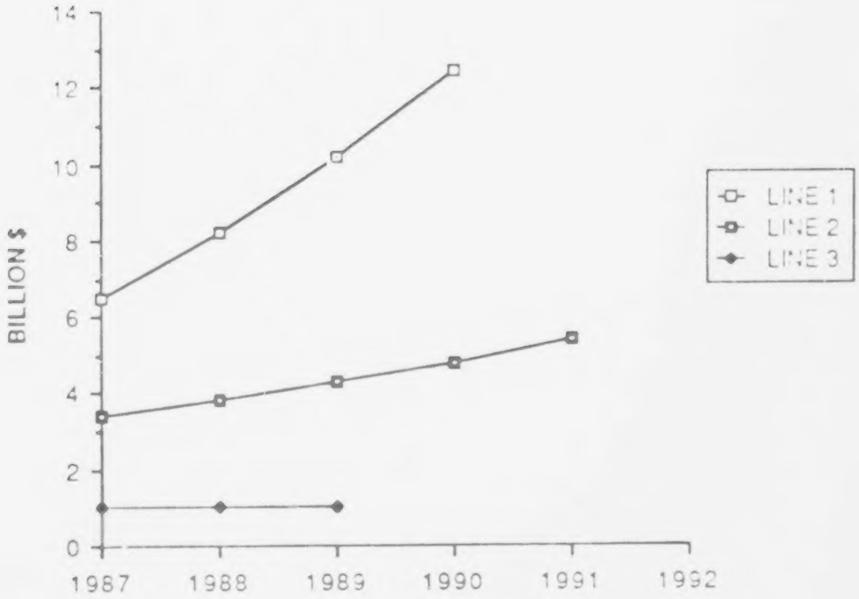


Line 1 - GAO Est. of Unused Trust Fund Balance

Line 2 - Est. Cost of Aviation Delays

Line 3 - DOT's F&E Proposal, 1987-89

GRAPH 3

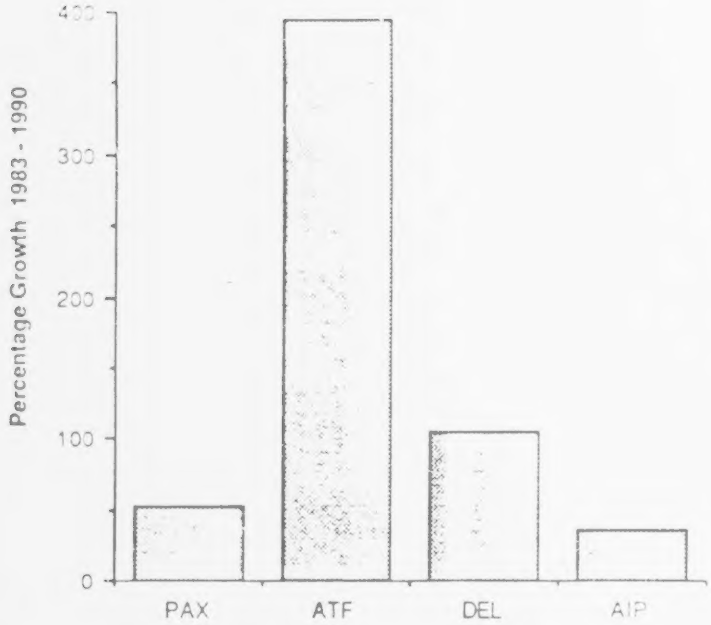


Line 1 - GAO Est. of Unused Trust Fund Balance

Line 2 - Est. Cost of Aviation Delays

Line 3 - DOT's AIP Proposal, 1987-89

GRAPH 4



PAX - Est. Percentage Passenger Growth, 1983-90

ATF - Est. Percentage Growth of Unused Trust Fund Balance, 1983-90

DEL - Est. Percentage Growth of Aviation Delay Costs, 1983-90

AIP - Est. Percentage Growth of AIP Appropriations, 1983-90

Airport research and development.—Certainly, the largest contributor to efficiency and reduction of delays in the aviation system will be due to airport improvements—new airports and new runways. There are, however, two other categories of improvements which can significantly affect system efficiency—airspace procedures and facilities and equipment.

Airspace procedures.—The FAA's air traffic service introduced IFR converging approaches in 1986. This is significant because of the converging widespaced potential application at airports.

Converging approaches.—More than 70 of the top 100 airports have potential converging approach applications. In some cases, there could be a virtual doubling of arrival capacity utilizing IFR converging approaches.

A computer analysis indicates that arrivals per hour could increase from: 26 to 45—Boston; 25 to 51—Denver; and 25 to 50—Newark.

This is a gross benefits estimate and does not consider local contingencies such as noise abatement procedures. However, the estimates reflect a fair representation of capacity increases which may be achieved.

IFR converging approaches are only possible today at relatively high weather minimums. Further research is necessary for development of surveillance systems and other equipment and procedures in order to realize the full capacity improvement potential for converging runways.

In-trail separation.—The air traffic service introduced improved in-trail separation procedures from 3 N.M. to 2½ N.M. on final approach in 1986, to be effective in 1987. FAA's technical center has estimated delay reduction of 5,000 hours could have been achieved in 1986 at LaGuardia alone with the procedure. The FAA technical center estimates an annual delay saving of 25,000 hours in 1991 at Atlanta due to improved in-trail separation. Additional improvements in the procedure will require further research and development in Wake Vortex surveillance and avoidance.

Parallel approaches.—Improvements in parallel runway operations can also lead to significant airport efficiency improvements. There are at least 10 major airports and many smaller airports which have parallel runways separated from 2500 to 4300 feet.

2500 feet is the present minimum spacing to allow dependant IFR parallel approaches maintaining a 2 N.M. stagger between aircraft approaching each runway in addition to longitudinal separation. 4300-foot spacing is the present minimum separation between parallel runways for independent IFR parallel approaches.

A computer analysis indicates capacity gains are achievable if the 2 N.M. separation can be improved to 1 N.M. for dependent operations. Examples of those improvements stated in arrivals per hour are as follows: Phoenix—34 to 43; Memphis—35 to 44; and Salt Lake—36 to 45.

Further efficiencies are possible if separation standards can be improved to allow parallel runway spacings of around 3000 feet for independent IFR operations. Computer analysis shows possible increases in hourly arrival capacity as follows: Minneapolis/St. Paul—35 to 49; Detroit—36 to 50; and Portland, Oregon—35 to 52.

Improved parallel runway operations are a function of surveillance system accuracy and scan rate, as well as pilot and controller reaction time. Studies have shown that pilot and controller reaction time will allow for independent IFR parallel approaches at 3000-foot runway separation. These efficiencies are then dependent on improved on terminal surveillance systems.

Potential equipment suppliers have made proposals to FAA for conducting system demonstrations. The systems will supplement, not replace, airport surveillance radars. Some of the proposals are state-of-the-art, current technology derivatives of other systems, mode S or T-CAS. The systems do not require long range research efforts or additional avionics in aircraft.

One of the prospective suppliers, Bendix, is proposing the demonstration of a system which has the accuracy required and an update, or scan rate, of 1 second or less. The system appears to meet or exceed the requirements for independent parallel runway operations at around 3000 feet spacing.

That system should be demonstrated now. There are other systems which may be worthy of demonstrations as well. If system demonstrations begin in the 87–88 time frame, it is possible to undertake a competitive procurement and achieve production system deliveries in 1990.

The problem does not appear to be one of technology, but one of execution of the project.

Projections.—FAA's own estimates show a potential for 30 seriously congested airports by 1990 handling 55% of U.S. enplanements. Those estimates suggest 61 seriously congested airports in the year 2000 representing over 70% of enplanements.

The number are also indicative of what could happen at smaller airports as well. The airport research and development programs under way at FAA are long term and underfunded.

Funding.—In recognition of the airport R&D problem, Congress passed a special appropriation of $5.5 million for airport capacity research and development for FY 1987. A number of airport capacity R&D programs will be accelerated with those funds including:

A demonstration program for an improved terminal area surveillance system for improved parallel runway operations.

Application of computer modeling for airspace planning in the air traffic services' east coast and west coast plans.

Application of computer modeling for airport improvements through airport capacity task forces at specific airports.

Wake Vortex detection and surveillance.

Production of the 1987 airport capacity enhancement plan which identifies and consolidates airport capacity programs.

The recognition from Congress of the need for the special appropriation was significant. However, the job has just begun. Funds will be required to continue the improved terminal area surveillance demonstration in 1988 and 1989. Funds will also be required for production and installation of the systems in the early 1990's.

Funds are needed to continue the improvement and application of computer modeling to airport and airspace improvements. And, funds are required to continue research and development into airport pavement and lighting design and other programs involving airport pavement reliability and runway occupancy time.

Airport research and development has a continuing funding requirement of $25 million dollars annually. Those funds should be specifically identified for airport research and development on a continuing basis. In the absence of the specific identification of the funding, the programs are at risk when in competition with the larger NAS plan programs.

If airport research and development is not accelerated, the results will be obvious as delays and congestion back up throughout the system.

Airport delays are exponential, as an airport approaches capacity, average delays become longer. Conversely, investment in airport efficiency provides exponential gains. A small increase in airport capacity can provide a large benefit in delay reduction.

Airport research and development is a smart investment for the system.

AOCI/AAAE JOINT PROPOSAL FOR POST-1987

AIRPORT AND AIRWAY IMPROVEMENT PROGRAM

Airport Improvement Program Recommendations

1. Authorization Term/ Funding Levels

The Airport Improvement Program (AIP) should be reauthorized for five years and funded at $1.8 billion in the first year, with annual increases of $100 million. Funding should be allocated as follows: $1.1 billion for AIP entitlement and discretionary grants; $350 million for airport capacity discretionary grants; and $350 million for a special noise fund. In addition, a separate Revolving Loan Fund for land acquisition and other appropriate purposes should be created within the Airport and Airway Trust Fund and at least $500 million made available over the five-year authorization period.

The substantially higher AIP funding level will provide increased funding for non-primary commercial service, general aviation and reliever airports through discretionary and special fund grants. All categories of airports should be eligible for "capacity" and "noise" discretionary grants and all categories should receive some funding over the authorization period.

2. AIP Full Funding Trigger Mechanism

If in any year the AIP funding level (obligation ceiling) is less than a minimum authorized level of $1.8 billion (plus annual increases), the federal prohibition against "passenger facility charges" (PFC) shall be repealed automatically. Such charges should be limited to an amount necessary to finance airport-related projects.

Appropriate abrogation provisions shall be enacted to facilitate the imposition and collection of PFCs at airports which choose to impose them. In the event defederalization is provided: (1) airports remaining in the program shall receive at minimum the same level of AIP funding they otherwise would have received, and (2) the passenger ticket tax shall be reduced commensurately.

3 Formula and Allocation Changes

The current discretionary "set-aside" categories should be eliminated, except that a reliever airport minimum guarantee should be provided within the discretionary fund. Noise compatibility projects would be funded by a new AIP noise fund (see #1 above).

The AIP entitlement formula allocations should be revised as follows:

a. increase minimum allocation for individual primary airports from the current $200,000 to $300,000 per year.

b. increase maximum allocation cap for individual primary airports from the current $12.5 million to $16 million per year.

c. revise passenger enplanement (entitlement) formula to reflect cargo traffic at airports.

d. revise the definition of "primary" airports to include airports enplaning more than 10,000 passengers per year. *

4. Sponsor Certification/ Advance Construction Reimbursement

To reduce bureaucratic tangles and construction delays, entitlement funds should be disbursed directly to primary airports at the beginning of each fiscal year based on preapplications on file with the FAA, and airports should be able to collect interest on such funds. Further, each airport sponsor receiving funds will certify compliance with all rules and restrictions imposed on AIP grants (as permitted under Section 509 (d) of current law.)

Airport sponsors may proceed with the construction of essential projects with their own funds prior to any federal commitment without loss of AIP eligibility for reimbursement, provided the project is otherwise AIP eligible and all work is accomplished in accordance with AIP requirements.

5. Grant Assurances

All AIP sponsor assurance requirements must be identified in a single regulation that is defined by law as the complete, inclusive and specific list of obligations for accepting grants. Any future changes shall be made only through administrative rulemaking procedures. Where possible, current sponsor assurances should be streamlined or eliminated.

NOTE: * Assumes increased AIP level ($1.8 billion) and elimination of current 5.5% set-aside for "non-primary commercial service airports" ($55 million in FY '87). Some 150 airports having 10,000 - 40,500 annual enplanements would thereby become eligible for apportionment funds (totalling at least $45 million annually based on proposed $300,000 minimum entitlement per primary airport).

6. Airport Proprietary Rights

Language protecting the proprietary powers of airport operators should be included in the AIP reauthorization law to preserve local control over airport operations and environmental matters. Grant assurances should not be changed to require airport landside capacity be balanced with airside capacity nor any other new assurances restricting proprietors' rights.

7. State Role

The current level of state involvement should be maintained as is.

8. Operations & Maintenance Funding/ Penalty Clause

Congress should include a penalty trigger to require that Trust Fund obligational authority for airports be met before FAA operations and maintenance (O&M). The current "penalty clause" should be stiffened so that O&M funding from the Trust Fund is:

a. limited to an amount not exceeding the level appropriated (obligation limit) for AIP and the Revolving Loan Fund; and

b. reduced by three times the amount unappropriated for AIP and Facilities & Equipment (F&E).

Further, if in FY 1991 or 1992 the uncommitted Trust Fund surplus exceeds $1 billion, then no Trust Fund monies shall be made available for O&M (until the surplus falls below that level).

In consideration of the above penalty clauses and trigger mechanisms necessary to protect Trust Fund capital programs, O&M spending from the Trust Fund should be increased from the current law authorization level of $1.34 billion to $1.6 billion in the first year, with annual increases of $200 million per year, up to a maximum $2.4 billion in the last authorization year.

Other Trust Fund Program Recommendations

9. Trust Fund User Taxes/ Surplus Trigger Mechanism

User taxes supporting the Airport and Airway Trust Fund should remain at 1982-1987 levels. However, if in FY 1991 or thereafter, the Trust Fund's uncommitted surplus exceeds $1 billion, then all user taxes should be reduced or suspended automatically until the surplus falls below $900 million. Monies borrowed or available to be borrowed from the Revolving Loan Fund should not be included in determining the uncommitted surplus.

10. Facilities & Equipment

Funding for the Facilities and Equipment (F&E) program should average approximately $1.5 billion per year.

11. Research, Engineering & Development

Funding for the Research, Engineering & Development (R,E&D) program should average approximately $200 million per year, and provide $25 million annually dedicated to airport capacity research & development through a separate FAA budget line-item.

12. Trust Fund Off-Budget

The Airport and Airway Trust Fund should be removed from the unified Federal Budget and exempted from budgetary limitations. This effort will be pursued separately from AIP reauthorization.

TABLE 1.—AOCI/AAAE AIRPORT AND AIRWAY IMPROVEMENT PROPOSAL—Proposed Program Funding Levels and Projected Trust Fund Surplus, Fiscal Years 1988–1992

[In billions of dollars]

	1988	1989	1990	1991	1992	Total
Trust Fund Expenditures:						
Airport improvement	1.1	(1)	(1)	(1)	(1)	(1)
Capacity Fund	.35	(1)	(1)	(1)	(1)	(1)
Noise Fund	.35	(1)	(1)	(1)	(1)	(1)
Total AIP	1.8	1.9	2.0	2.1	2.2	10.0
Revolving Loan Fund	.1	.1	.1	.1	.1	.5
Facilities and equipment	1.6	1.6	1.5	1.5	1.3	7.5
Research and development [2]	.2	.2	.2	.2	.2	1.0
Total Capital Programs	3.7	3.8	3.8	3.9	3.8	19.0
Operations and maintenance (Trust Fund share)	1.6	1.8	2.0	2.2	2.4	10.0
Total expenditures	5.3	5.6	5.8	6.1	6.2	29.0
Trust Fund Revenues [3]	4.2	4.5	4.7	4.8	5.4	23.6
Balance	1.1	1.1	1.1	1.3	.8	5.4
Uncommitted Surplus:						
Prior year end	5.6	4.5	3.4	2.3	1.0	
Year end	4.5	3.4	2.3	[4]1.0	.2	

[1] Plus 5 percent annual increases.

[2] Includes $25 million set-aside for airport T&D.

[3] Based on OMB projections.

[4] If FY 1991 (or 1992) surplus exceeds $1 billion, trust fund taxes are suspended (until surplus falls below $900 million), and no trust fund monies may be expended for O&M.

TABLE 2.—TRIGGER PENALTY CLAUSE—OPERATIONS AND MAINTENANCE FUNDING FROM AVIATION TRUST FUND

[In millions]

AIP and F&E appropriations below full authorization	Fiscal year—				
	1988	1989	1990	1991	1992
$0 million (Full funding—O&M TF share not reduced)	$1,600	$1,800	$2,000	$2,200	$2,400
$100 million (O&M TF share reduced by $300 million)	1,300	1,500	1,700	1,900	2,100
$200 million (O&M TF share reduced by $600 million)	1,000	1,200	1,400	1,600	1,800
$300 million (O&M TF share reduced by $900 million)	700	900	1,100	1,300	1,500
$400 million (O&M TF share reduced by $1.2 billion)	400	600	800	1,000	1,200
$500 million (O&M TF share reduced by $1.5 billion)	100	300	500	700	900
$600 million (O&M TF share reduced by $1.8 billion)	0	0	200	400	600
$700 million (O&M TF share reduced by $2.1 billion)	0	0	0	100	300
$800 million (O&M TF share reduced by $2.4 billion)	0	0	0	0	0

Note.—AOCI/AAAE propose including a penalty trigger to require that Trust Fund obligational authority for airports be met before FAA operations and maintenance (O&M). The current penalty should be stiffened so that O&M funding from the trust fund is: (A) Limited to an amount not to exceed the level appropriated (obligation limitation) for AIP and the Revolving Loan Fund; and, (B) Reduced by three times the amount unappropriated for AIP and Facilities and Equipment. Further, if in FY 1991 or FY 1992 the uncommitted trust fund surplus exceeds $1 billion, then no trust fund monies shall be made available for O&M until the surplus * * *

AIRPORT OPERATORS COUNCIL INTERNATIONAL FORECAST OF AIRPORT CAPITAL DEVELOPMENT AND NOISE COSTS

[In billions of 1986 dollars]

	1988	1989	1990	1991	1992	Total
Capital and noise needs:						
CS [1]	4.4	4.5	4.6	4.7	4.9	23.1
Reliever	.3	.3	.3	.3	.4	1.6
GA [2]	.8	.9	.9	1.0	1.0	4.6

AIRPORT OPERATORS COUNCIL INTERNATIONAL FORECAST OF AIRPORT CAPITAL DEVELOPMENT AND NOISE COSTS—Continued

[In billions of 1986 dollars]

	1988	1989	1990	1991	1992	Total
Total	5.5	5.7	5.8	6.0	6.3	29.3
Contributions:						
Federal [3]	1.8(33)	1.9(33)	2.0(34)	2.1(35)	2.2(35)	10.0(34)
States [3]	.2(4)	.2(4)	.2(4)	.2(3)	.2(3)	1.0(3)
Local [3]	3.5(64)	3.6(63)	3.6(62)	3.7(62)	3.9(62)	18.3(62)

[1] CS—Commercial Service airports.
[2] GA—General Aviation airports excluding relievers.
[3] Figures in parens are percentages.

Senator Ford. Mr. Hedrick, you have three minutes compared to the other two of your colleagues there. But I am going to get on to questions if you do not mind. I do not know who will answer these and I will let you kind of throw the ball up between you, since it is a joint statement.

But as I take the statement this morning, it is a joint position that calls for much higher AIP funding levels. Now, you ask for $1.8 billion in fiscal 1988, with that amount increasing $100 million a year through 1992.

Do any of you all, having some knowledge of what is going on on Capitol Hill, feel that this can be realistically done, given the pressures with the Gramm-Rudman-Hollings and others that we are faced with?

[Pause.]

Senator Ford. I want to tell you, we have to have a little levity in this place or we would all go nuts. So I am glad that we are at least friendly about it.

I tell you what I will do. Mr. Aaronson, you take this one and then I will go to Mr. Hedrick for the next one. If you do not understand it, Mr. Reilly will advise you, as Chip will to Mr. Hedrick.

Mr. Aaronson. That is extremely kind, Mr. Chairman. I think the very short answer is that we recognize the dilemma that the Congress and the entire nation face. But this discussion is one that has been going on for many years. As has already been pointed out rather emphatically, these programs we are discussing today are funded by a special trust fund.

And it just does not make sense to us—and I have heard members of the subcommittee this morning express some of the same thoughts—to have programs which are supported by special taxes from the users fall under restrictions which are concerns of the overall budget.

We do not have the answers for you, Mr. Chairman. We really must rely on you and your colleagues to provide the leadership and work our way out of this morass. We need to spend the money.

Senator Ford. As I see it, there is one hole in the administration's proposal. They say, under their proposal, there will be about a billion dollars left in the trust fund.

What he did not say was that they are increasingly spending money for FAA operational costs, rather than for the capital improvements of the airports. Mr. Hedrick, you advocate a five year authorization bill over the administration's two year proposal. How would a two year period compare with the five year period that you propose?

Mr. HEDRICK. Well, it would certainly be more difficult, because airports, as well as the FAA, need a greater length of time for planning. Two years or three years really is not adequate for a planning cycle.

By the time you really get to that point on planning projects, your bill has expired, your funding is in question. Certainly a five year program makes a lot more sense in terms of planning and good budget management principles.

Senator FORD. Senator McCain.

Senator MCCAIN. Thank you, Mr. Chairman.

Just to follow up on the line of questioning that the chairman was pursuing, and taking it one step further, I would be interested in your views of the administration proposal as to the apportionment of the funds to be expended in the next couple of years. Specifically, could you comment on the proposal that would reduce primary airport entitlements from 50 to 35 percent and allocates increased funds for capacity enhancement, create a substantially larger discretionary program that is statutorily directed to capacity enhancement and safety and security concerns at primary or large commercial airports, increase State apportionments to 22 percent to encourage voluntary State block grant programs, and finally, creates a voluntary defederalization program in which any airport may forego Federal grants.

I would appreciate your comments on the administration's proposal and I would be curious to know if you know anyone who is interested in that as well.

Mr. REILLY. Senator, I think a quick answer is that what they have done in their program is to recognize what we are detailing here today, and that is the need for tremendous increases in airport capacity money. What they have done, though, is to take the old funding level of $1 billion and just scramble the funding levels and compartments around, to try to put more emphasis on the deadly needs of noise and capacity that we face right now.

That is not going to serve the job. It is not going to get it done. I think that this committee has to focus on what we tried to detail today. There are significant increases in capacity funding needed if we are at all going to meet the needs of the next decade.

Senator MCCAIN. So your problem is not the priorities that are set by the administration; it is the overall amount of funding?

Mr. REILLY. No, I think you are correct, Senator, that they have tried to give more emphasis to capacity. But the entire industry recognizes that. The real problem is where is the money going to come from to finance those needs. We are going to end up with gridlock unless we take that step.

Senator MCCAIN. Would anyone else like to comment?

Mr. BARCLAY. Senator, we do object to some of the new concepts they have gotten involved. They have something that they are calling defederalization, that goes back to a concept this committee has passed several times.

But what they are really proposing is simply defunding, because they would eliminate funding for airports that got out of the program, but they would not have a commensurate reduction in the Federal ticket tax in order to make room for a local, an imposition of a local fee. And that was always the concept that this committee passed in the earlier days when it called something defederalization. It was a replacement of local taxation for Federal taxation, and that is not part of the administration's plan.

We also would object to the State block grant program, where States would begin to make their priority decisions substitutes for local decisionmaking which occurs now. The local governments manage their own programs and deal directly with FAA.

We see the State involvement as a new layer of bureaucracy in between the locals and the Federals. We have a mature system today and we oppose any change in the State involvement in the AIP process.

So those are at least two issues that we think are important for the committee to look at.

Senator McCAIN. Thank you, Mr. Chairman.

Senator FORD. Senator Kassebaum.

Senator KASSEBAUM. Yes. I would like to follow up with a question concerning the block grant approach. I do not know that we need another layer of bureaucracy. I think we would all be disappointed if the block grant proposal evolved in that direction.

But if you have a strong State authority, you obviously should have good relationships between the State authority and your airport operators. And does it not make some sense that a state authority will know the needs of that State and be able to better analyze and apportion the moneys at the State level?

I suppose politics enters in there just as much as it does here. But in theory, should the block grant approach not work in a more efficient way?

Mr. HEDRICK. May I comment on that, Senator?

Senator KASSEBAUM. I wish you would.

Mr. HEDRICK. There are a number of States that do do a very good job. They are performing that function as helping and assisting smaller airports in a very effective manner. A number of States do well. Massachusetts traditionally has done well, New York State does fairly well, and Nebraska is probably the best.

But there are also a number of States who inject and use highway-oriented people and construction people and try to replace the judgment of airport people with their judgment. And all too often, airport operators and executives are faced with fighting with that State level of highway type engineers, whose judgment and ideas of priority and safety are in a totally different type of discipline.

And I think that is where the problems come from, aside from—those are professional problems, aside from any political difficulties that may arise.

Kansas, I am originally a native of Kansas, and Kansas had always had, when I was there for eight years at an airport near Wichita, had more of a PR-type aviation department, but it was very effective in that. They really lacked any engineering talent at all at that point in time.

So I think it varies so much between every State that it is really difficult to have any standardization at all.

Mr. **Barclay**. Senator, if I could add. We are not opposing any State role. Currently States can channel the money through channeling acts, and some States choose to do that and some do not.

Those that do that, particularly Illinois and a few others, have a fair degree of involvement in the whole process through State channeling. They also get one percent of the funds at present for State planning, and they can use that just with the power of persuasion and logic through the State planning to influence what goes on in the State.

And so what we are objecting to is a mandatory process of getting the States involved in inserting their judgment for local judgment on what is the proper priority of a project among the airports.

Senator **Kassebaum**. Does it concern you at all that for those States which can meet the qualifications laid out by the administration's guidelines, that funding need no longer be allocated according to the percentages that have previously been required for noise abatement, reliever airports, or general aviation?

Mr. **Reilly**. Senator, if I may just begin to answer that, we found in the past that perhaps the more categorizations and parts you split the money up into, probably the less of a good job you are going to do overall. We found in the past that working with FAA through all of the airports has been a superlative way to build a first class national airport system.

We are concerned that getting away from the fine job they have done and the great leadership they have shown could jeopardize overall development of the system.

I must say that, in response to questions I ask of airport people about the State funneling, et cetera, the only thing I hear back is that there are delays in the moneys coming through, nothing gets done to enhance that money. We are concerned from comments we have heard that in order to develop the other half or more of the State groups to come up to a level to function, that they are going to need a lot more funding from the State level.

Chances are doubtful that they are going to get it from the statehouses. Chances are very good they are going to have to exert new taxes at the State level in order to support this new type of a concept.

But barring all of that, Senator, we are juxtaposed right now with aviation where we have some critical decisions to make on a national system today in order to bring us into the next century. And I do not think that this is the appropriate time to start dispersing the responsibilities for the mammoth capacity and noise problems that we have to solve today.

Senator **Kassebaum**. Well, as you know, I have introduced legislation in this Congress and the last Congress to remove the aviation trust fund from the unified budget. And being a member of the Budget Committee for now nine years, I can only assure you it is not going to happen, no matter how much wishful thinking may ensue on all of our parts, nor will the trigger tax proposal be enacted.

As much as I think that is a good mechanism and has merit, a point of order could lie against it by the Budget Committee unless indeed it is a statute that would take effect.

And so I think that, given those realities, it is going to be difficult to address the trust fund issue in terms of these solutions. I certainly agree with you about the need for a longer reauthorization, and I think the budget levels will again be a problem. But in the past, as you know, we have authorized at the higher levels. They have not been appropriated.

This certainly adds to our frustration. In addition, this year we are dealing with some different priorities as far as how the trust fund moneys will be spent, particularly the Administration's proposal to allocate more of the trust fund to O&M. Do these problems ultimately cause some concern for the rest of the program?

Mr. **Reilly**. Senator, without being too myopic—and I seriously mean this—the tenet of this committee is to determine what the needs are, and I think that that is what these witnesses are here to tell you. We are facing tremendous needs if we are going to hold together a national airport system.

I think the responsibility of this committee is to face up to that and to at least dialogue on what those levels should be. We too share the responsibility then of going to the Appropriations Committee, getting those funding levels. But I think an honest effort first and foremost should be made at this level to really find out what we do need.

Mr. **Barclay**. Senator, if I could just quickly add two points. On the trigger tax proposal that is in our plan, it is purposely put in the beginning of the fourth fiscal year of the five year program as a trigger tax that would suspend all taxes if the trust fund surplus by that time is not below a billion dollars.

It was put in the beginning of the fourth fiscal year so that it would not be subject to a Budget Committee point of order, and we think that its prospect for passage, primarily because it was done twice by Congress at the end of the last session, in the Superfund legislation and in the Customs user fee bill, and there was some recognition over on Finance and Ways and Means that we should not be collecting user fees and then not spending them for their intended purpose There was some dialogue about that between the two chairmen at that time.

And so those are the reasons we hold out some glimmer of hope this might be possible.

Senator **Kassebaum**. Thank you.

Senator **McCain**. Mr. Chairman, I would just like to respond to Mr. Reilly if I could. I think that this subcommittee understands those obligations, and I believe that the hearings that the chairman has scheduled and his interest in this issue indicates that we are trying to do exactly as you stated.

I hope you are in agreement with that.

Mr. **Reilly**. Absolutely, 100 percent. I just did not want it to be diluted and to give more focus to what Mr. Aaronson said about trying to get the funding committees of the Senate recognizing this situation.

But we truly appreciate all this committee has done and seems to continue to want to do. We appreciate it.

Senator **McCain**. Thank you

Thank you, Mr. Chairman.

Senator **Ford**. Thank you for extracting those kind remarks.

Mr. Hedrick, Mr. Aaronson, Mr. Barclay, Mr. Reilly, we do thank you and appreciate your testimony today, and we look forward to working with you in the future.

The next witnesses this morning will be Kenneth A. Rowe, President, National Association of State Aviation Officials, and he will be accompanied by my good friend Leslie Dawson, Secretary of Transportation, Commonwealth of Kentucky, Ms. Gina Marie Lindsey, Manager, Alaska Statewide Aviation Department.

STATEMENTS OF LESLIE DAWSON, SECRETARY OF TRANSPORTATION, COMMONWEALTH OF KENTUCKY; KENNETH A. ROWE, PRESIDENT, NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS; GINA MARIE LINDSEY, MANAGER, ALASKA STATEWIDE AVIATION DEPARTMENT; AND CLARENCE COOK, DIRECTOR, AVIATION DIVISION, NEW YORK STATE DEPARTMENT OF TRANSPORTATION

Mr. DAWSON. Mr. Chairman, we appreciate the opportunity to come and speak to the committee. I represent the Association of State Highway and Transportation Officials, being chairman of the aviation committee for that group. We have submitted to you our statement, which dwells on many of the subjects which you have already heard this morning.

Without getting into too much detail, I would like to say that we have grave concern with regard to the trust fund and the balance that resides there, considering all of the needs which the general aviation airports and the airports of national significance have today.

To summarize in as short a time as possible, the Association of State Highway and Transportation Officials have generally accepted and adopted as principle the position of the National Association of State Aviation Officials, advocating that the responsibility for the administration of funds for general aviation airports be the responsibility of the States.

In addition to that, we have taken a position of strongly recommending that consideration be given, not only to the use of aviation trust funds for the purpose of airport development, but that of land site development, which plays such an important role in the funneling of traffic to airports.

The trust fund and its condition I believe has adequately been covered this morning by the other speakers to the committee, and Mr. Rowe and others will have other comments to make on that.

I would like to hold out to the committee that the proposal for a five year bill, certainly from the Association of State Highway and Transportation Officials, holds great merit, particularly in light of the comment by Senator Kassebaum that the possibility of the trust fund going off budget is a great hope with not much chance of success.

We realize that, just as we realize, with regard to the highway trust fund, that that was the same situation. We keep hoping and keep pushing our case, with the hope that one of these days the recognition of the merit of our position will come to fruition.

The soundness, I think, of the position that States should have more discretion with regard to the use of funds in the development of general aviation airports certainly does not conflict at all with our opinion that airports of national significance should have a national policy and be totally Federally administered, in order that the great air transportation system that they involve not become fragmented.

However, the plus from the State standpoint is that more and more of the States today are involved in comprehensive State planning, which is done in a very, very competent manner, which gives them the opportunity to recognize the impact which the smaller airports today are having on economic growth in each of the States.

At one time this was a transportation or a highway issue in transportation. It no longer is. Airports play as vital a role in the development of industry in a State as does the highway system and moreso. Today airports of small towns are an essential element in the transportation system.

The role and the importance of the block grant situation has divergent opinions among all of us. There is a group—and I think I support that group—that are of the strong opinion that to take the block grant system produces a bit of a fragmentation, and on that basis I think that we feel that we would be in a better position with a general definition of how the overall funds are to be used for airport or capital improvements, and also from the standpoint of the renovation or improvements in the present structures.

Mr. Chairman, that is basically a summary of, and a light summary of, the written remarks which we have submitted to the committee.

[The statement follows:]

STATEMENT OF
C. LESLIE DAWSON
Secretary, Kentucky Transportation Cabinet

Chairman, Standing Committee on Aviation
American Association of State Highway and Transportation Officials

Mister Chairman and members of the Aviation Subcommittee, the American Association of State Highway and Transportation Officials is very much concerned about the future of the nation's airport and airway system development programs and the Airport and Airway Trust Fund. I am C. Leslie Dawson, Secretary of the Kentucky Transportation Cabinet, and Chairman of the Association's Standing Committee on Aviation. I appreciate this opportunity to testify before you on this most important subject, in response to your invitation.

The American Association of State Highway and Transportation Officials (AASHTO) represents the departments concerned with transportation and highways in the fifty states, the District of Columbia, and Puerto Rico, to foster the development, operation and maintenance of an integrated national transportation system. The active members of AASHTO are the duly constituted heads and other chief directing officials of the member transportation and highway agencies.

The policies presented in this statement were developed and approved by our Standing Committee on Aviation, which consists of directors of state transportation agencies and directors of state aviation agencies, appointed to represent AASHTO and the National Association of State Aviation Officials in the development of consistent aviation policies. These policies were subsequently approved by our Policy Committee, which requires an affirmative vote of at least two-thirds of the chief administrative officers of AASHTO member departments.

The states believe it is extremely important to continue the authorization of funding for the federal aviation development programs, and urge the timely enactment of legislation continuing these development and improvement programs, the Airport and Airway Trust fund, and appropriate levels of aviation user taxes.

AASHTO would thus like to address several topics pertinent to upcoming reauthorization legislation.

The Role of Governments in Aviation

AASHTO believes that the separate and combined efforts of federal, state and local governments, as well as the private sector, are required to achieve a balanced national air transportation system.

In support of this system, the primary roles of the federal government should be: 1) to establish and maintain uniform standards that promote the safety of aviation operations; 2) to operate and maintain the nation's airspace system; 3) to define a national system of airports; and 4) to collect and distribute federal airport and airway user taxes to help support the nation's airports and airspace system.

Turning the national air traffic control system responsibilities over to a federal corporation may be a workable alternative to the traditional system administered by the Federal Aviation Administration. However, we believe that to date, there has been insufficient evidence presented that the overall benefits of this fundamental shift are worth the risk of dismantling a system that, for all its faults, has functioned effectively over the years. Congress should not risk privatization in this critical area until the evidence is clear.

The primary role of state government should be to integrate and support aviation through planning and funding of a state air transportation system. AASHTO believes that each state should have an organization capable of carrying out this role for the benefit of its citizens. We also believe that state agencies are increasingly developing the capabilities needed to successfully accomplish these functions. For example, in a survey conducted by AASHTO in late 1986, of 46 states responding, 45 noted that they were conducting aviation system planning, including assessments of facility needs in 44 states and aviation demand forecasting in 42 states. A copy of the survey is being provided with this statement, for your further information. In mid-1986, the National Association of State Aviation Officials (NASAO) conducted a survey which indicated that state aviation agencies in at least 94 percent of the states are capable of providing necessary resources for administrative staff, regulatory matters, policy, engineering, planning, public information and accounting/statistics. Where state aviation planning and program management capabilities are well developed, states should have the option of assuming a direct role in the administration of federal funds to airports, to better reflect state program priorities.

The primary role of local government should be to develop and maintain the airport facilities necessary to serve the public as a part of the national and state air transportation system. Financial and technical assistance from the federal and state governments should be provided to help accomplish this role.

Funding the Aviation System

Basic Aviation System Needs

There is a continuing need for a national program of financial assistance for airspace and airport planning and facilities, which should continue to be funded by a system of federal user taxes.

The states strongly believe that these continuing needs should be addressed by the expeditious enactment of multi-year aviation reauthorization legislation, which can help provide a dependable and predictable level of funding and allow states and local governments to accurately plan for and accomplish future projects.

A system of state and federal priorities should be established with primary emphasis on safety, preservation of the existing airport system, airport capacity expansion, consolidation for efficiency where appropriate and new airport construction. As we mentioned earlier, most of the states are already doing aviation system planning which could be utilized to help appropriately set these priorities. Several states are also already using multi-year planning and programming processes to most effectively utilize aviation funding at the state level. Program funding and project eligibility should be based on the needs identified in state and/or federal plans.

AASHTO believes that a federal policy statement is needed to address airport access and capacity needs. This policy should recognize that airport operators, typically, do not control the resources required to meet landside capacity and access needs. Consequently, approval of federal grants for airside capacity projects should not be conditioned upon the capacity of landside facilities. The federal government should work cooperatively with the states and local governments to ensure that both landside and airside capacity requirements are addressed through a more flexible program and funding structure. Greater flexibility is also needed in the definitions of eligible airports and categories in order to target funds to meet areas of greatest need.

The federal government has the primary responsibility for providing navigation aids for air commerce. However, the present facilities and equipment (F & E) budget of the Federal Aviation Administration is insufficient to provide necessary improvements to the airway system covering the U.S. airspace. This situation requires an increase in F & E funding and the inclusion of approach aids as eligible items under the Airport and Airway Improvement Program. Such actions would allow an expedited and orderly transition into such improved technologies as Microwave Landing Systems, LORAN-C nonprecision approaches and Automatic Weather Observation/Reporting Systems.

Direct State Involvement in Airport Improvement Program Administration

In the past several years, the federal government has recognized the advantages and appropriateness of involving state government in the administration of a number of federal programs. This shift of responsibility has proven to be more effective and efficient in a myriad of programs which have become more responsive to the real needs at the state and local levels. This has proven to be particularly true in transportation programs.

For example, the states have had a major role in administering the federal highway program for many years. The effectiveness and efficiency of using a federal/state partnership for funding and administration of the development, financing and building of the federal-aid highway system is perhaps our nation's greatest public works success story. Also, in recent years, the states have been given a much greater role in administering the federal transit and railroad programs.

Just as the states administer federal highway, transit and rail funds, they can and should administer airport funds. AASHTO fully recognizes that the nation's largest airports have substantial national and at times international significance, and the need for direct federal involvement, as well as continued state involvement, is apparent. Likewise, the nation's airways must remain primarily a federal responsibility. However, airport improvement funds for the other airports can be administered more efficiently at the state level and the funds can be used more effectively in response to state and local priorities. We are pleased to note that the Federal Aviation Administration and the U. S. Department of Transportation also agree that the states should administer grant funds to certain airports, and that provisions to accomplish this are included in the Administration's recently proposed aviation reauthorization bill. State costs incurred for the administration of this program should be an eligible expenditure under the Airport Improvement Program.

The funding categories in the Airport Improvement Program should be divided into two tiers. The first tier should include those large airports with substantial national significance, and we agree that direct FAA administration of grants and compliance programs for these airports should continue. This administration should, however, be consistent with a state's comprehensive aviation system planning process. Where the sponsor of a large airport desires to have eligible federal funds administered by the state in which it is located, this should also be allowed.

Grants and compliance programs for the second tier of airports, those with primarily state, regional or local significance, should be administered by states which are willing and able to do so, in accordance with an approved work plan. For projects in this tier, the federal matching share should not exceed 90 percent, but states should be permitted, where they so desire, to establish a lower federal matching share of any project in order to maximize the value of available federal funds.

As with all direct grants, basic federal policies and regulations should continue to apply to the use of these funds. We believe, however, that to maximize the potential effectiveness and efficiencies of this program, the states should have maximum discretion in project selection, program priorities and the allocation of funds. While the states support the administration by states of federal grants to these smaller airports, we remain fully aware of and supportive of the intent of the Airport Improvement Program, which is to enhance a national airport system. It is thus our intent that any state airport grants program take into full consideration the balance necessary between national, regional and local aviation needs, and the ways in which the different levels of the system work together, to ensure the best possible aviation system. Several programs administered by the Federal Highway Administration and the Urban Mass Transportation Administration can serve as models in developing program specifics.

We believe that providing for a state role in administering airport grants to smaller airports would yield significant benefits to the airports system, as well as to the public, and that it is a logical step to take. For example, state administration of these grants would use simpler and more efficient processes than are currently used by the Federal Aviation Administration. A number of states currently use multi-year transportation planning, programming and project prioritization processes, which are typically well attuned to both local and system needs, and employ a greater level of sophistication than the Federal Aviation Administration has been able to utilize in its own project prioritization processes. A number of states also now have channeling acts, for which state staffing and experience already exists. The direct state administration of grants would provide a single delivery system, and could be easily coordinated with direct state-level funding programs. We would also note that since nearly every state already has an active and viable state aviation agency, the administration of federal airport grants would not cause the creation of another level of state government.

Consistent with the responsibilities which would be assumed in administering federal airport funds, the states should also identify and develop dedicated state funding sources adequate for carrying out the state role in aviation.

Making Full Use of the Airport and Airway Trust Fund

The Airport and Airway Trust Fund, administered by the federal government, should continue to be a primary funding source for airport improvement projects.

As you know, in 1970 the Airport and Airway Trust Fund was established, funded entirely by user taxes, to pay for the expansion, improvement and maintenance of the nation's air transportation system. However, the actual appropriations from the Trust Fund have been considerably less than the revenues which support the fund, resulting in a large unobligated balance in the Trust Fund. In spite of the this fact, aviation user taxes were increased in 1982, with the belief and expectation that corresponding increases in appropriations would also be made. This has not occurred, and the Trust Fund balance consequently continues to grow.

The states believe that taxes collected from system users and placed in dedicated trust funds should be promptly and fully used to accomplish the purposes for which they were collected. The current Trust Fund balance of more than six billion dollars is inappropriate, particularly given the high number of needs which are going unmet every year.

Future federal appropriations should draw down the level of the Airport and Airway Trust Fund balance in order to help meet these needs. If the drawdown of uncommitted monies in the Trust Fund cannot be accomplished by 1988, efforts should be shifted to reduction or elimination of the federal user taxes until the unobligated funds in the Trust Fund have been used.

As shown in the AASHTO "Report on Future Directions for Aviation," a copy of which is being provided with this statement, airport needs have been identified in the National Plan of Integrated Airport Systems amounting to a total of $21.3 billion in the ten-year period 1986-1995, versus an estimated $17.0 billion in capital airport funding which is anticipated to be available from federal/state/local sources for that same ten-year period. This leaves a shortfall of $4.3 billion over the ten-year period. To meet all of these identified needs, an increase in taxes or a redirection of trust fund dollars from the Operations and Maintenance program would be required in the future. Federal, state and local governments should investigate methods of providing for these needs and meeting this shortfall.

Interest which accrues to Trust Fund monies is an integral part of that Trust Fund, and should, along with the Trust Fund monies, be dedicated only to those uses which help accomplish the goals for which the Fund exists. Again, the unobligated balance of the Airport and Airway Trust Fund should be drawn down, and the rate of accumulation of interest in the Trust Fund reduced, by appropriating the funds for the purpose for which they were collected: improvement of the airport and airway system.

Removal of the Trust Fund from the Unified Federal Budget

AASHTO strongly recommends that the Congress remove transportation trust funds from the Unified Federal Budget.

The Airport and Airway Trust Fund should not be subjected to the expenditure ceilings used in the Unified Budget process to help reduce the national deficit.

We believe that it is inappropriate to subject dedicated trust fund revenues to the annual Congressional budget resolution processes of the Unified Federal Budget. Since the user fees included in trust funds are collected in advance of expenditures, these expenditures cannot contribute to the federal deficit. Programs funded through these dedicated funds thus should not be subjected to the expenditure ceilings used in the Unified Budget process to help reduce the deficit. When the user tax collections exceed the rates of expenditure, these ceilings unnecessarily limit the program improvements intended by the Congress when it established those trust funds, and expected by the users from whom the taxes are collected. Trust funded program levels are most appropriately determined by the program needs and the level of user fees being collected to meet those needs.

Land Acquisition for Future Airport Projects

The states and the federal government should recognize the importance of advance acquisition of land for future airport expansions. Limited resources at both the state and federal levels, combined with rapidly escalating land costs, require the development of innovative financing measures for this purpose.

At the federal level, revolving loan accounts have been used successfully in other modes of transportation for advance land acquisitions. For example, such a program has been used for some years to fund the advance acquisition of right-of-way for future highway projects. The states and the federal government should support the use of similar measures to facilitate the timely and cost-effective implementation of airport expansion projects.

* * *

Mr. Chairman, this concludes our statement concerning this most important legislation. We appreciate the opportunity to share AASHTO's views, and would be pleased to respond to any questions you may have.

Senator FORD. Thank you very much, Mr. Dawson.

Mr. Rowe.

Mr. ROWE. Thank you.

You have heard from Mr. Dawson, who is Secretary of Transportation in Kentucky. Also with me, Mr. Chairman, is Gina Marie Lindsey, Manager of the Statewide Aviation System in Alaska. And also, we have Clarence Cook, the Director of the New York Department of Transportation, Aviation Division, at the table.

State government officials that have statutory responsibility to oversee adequate development of statewide air transportation facilities, like the Congress and the administration, have a responsibility to recommend improvements that best serve the citizens.

The American Association of State Highway and Transportation Officials and the National Governors Association supported State administration of Federal airport grants to all but the larger airports in 1980. That support is even stronger in 1987.

These organizations realize that the State administration of smaller airports takes advantage of the technical and management expertise that now exist at the State level. Since our prepared detailed remarks are a matter of record, I would like to highlight, with the aid of a couple of charts, what we believe to be the problems with the current program, a few specifics of our airport improvement program proposal, and the benefits of our suggestions.

First of all, I would like to have one of the charts put up here that will give us an example that I would like to refer to, insofar as the distribution under the current program for the year of 1985. You will note from this chart that only 17 percent of the 2,440 general aviation airports in the national airport plan received Federal funds in 1985. About 50 percent of the other commercial service airports and relievers were funded, while about 83 percent of the primary airports, the 280 largest airports, received benefits from the Federal program.

My colleagues testifying earlier represent this category—the 552 largest commercial service airports. Of course their testimony eloquently explained to you the needs and what the needs are out there in capacity. And so we will not dwell on that.

But there are other shortfall items that we see in the current program. Many user organizations, as well as local governments, view the aviation trust fund balance as a reason to not generate other airport capital improvement revenues. They simply wait for Federal money to solve their airport needs.

The huge deficit and annual appropriations process overshadows airport system needs. This has been seen time and time again as the needs have been defined in a variety of surveys and continue to increase, and the Federal appropriations to meet these needs continue to be tangled in the web of the process.

Additional duties have been assigned to the FAA airport service personnel that have reduced their available time for grant processing. This has occurred during the same time period when airport service staffing has continued to decrease.

The environment of airline deregulation-generated hub and spoke congestion, coupled with continuing noise problems nationwide, are exaggerating capacity problems. Obviously, the effects of the airline industry changes, while studied considerably, are still in a state of flux.

There are several other items that are detailed in our testimony regarding the current problems as we see them. I would like to now, if I might, talk about the recommendations for post-1987 AIP as recommended by NASAO.

NASAO believes that the new AIP law should be for a period of five years, with current user fee levels. Costs for preserving the existing airport and airway system should assume the highest priority for trust fund expenditures.

There should be a continued set-aside to address noise problems, another fund to address critical capacity and safety items, and a Federal revolving loan account to fund advance land acquisition, modeled after the many successful State programs.

There should be a drawdown of the trust fund surplus. The trust fund should be removed from the unified budget and exempted from budgetary limitations, and the current penalty provision relating to FAA operations and maintenance funding from the trust fund should remain in effect.

Specifically, the NASAO proposes a reorientation of the administration of the Federal airport improvement program into a national and State system. The national system would include primary hub airports. The State system would include the remaining nonhub primary and other commercial service airports, reliever airports, and general aviation airports. NASAO further proposes to fund the total airport program at $1.4 billion in 1988, with four percent annual increases through 1992.

I would like to now talk about the benefits of the NASAO recommendations. The main benefits that are derived from the NASAO proposal are related to improved efficiency, increasing capability, and better planning.

The State administration of Federal AIP grants for all but the designated small, medium, and large hub airports, if effectively managed, will result in taxpayers' dollar savings. First, it will eliminate current unnecessary duplication of work at different levels of government. Specifically, most states currently process paperwork to administer the State portion of Federal, State, and local projects. Meanwhile, a Federal employee is somewhere processing paperwork for Federal money.

We propose to create a Federal-State distribution process that has one person rather than two doing this work. If the State employee were doing the processing for certain categories of airports, as has been the case in the Federal highway program for decades, then the Federal employee would have more time for important national planning and regulatory and certification obligations.

We believe the States are well equipped to manage substantial aviation programs. And I would like to have another chart put up here for your reference, if we could, please. This chart shows that State capability and the Federal airport grant workload over the last ten years.

State positions dedicated to aviation and airport system planning have increased 15 percent from 1976 to 1986. The FAA personnel in the field administering airport programs is down about 36 percent in that same time period. During that same time frame open projects numbered 1,909 in 1976 and more than doubled to 4,372 in 1986.

The last issue is addressed by our last chart, Mr. Chairman. The Administration's proposal for a two year reauthorization program provoked our review of funding levels as intended by Congress under the current law, funds actually spent in the most recent year, 1985, as well as a look at the administration and the NASAO proposals.

State officials believe that planning has been underutilized during the current program. Only $6.8 million of the $9.1 million appropriated in 1985 was spent. NASAO has recommended a percentage of the State-administered Federal grant program be for aviation and airport system planning.

The administration proposal obviously de-emphasizes planning, with a maximum of $4.3 million permitted for planning if all States opt into the program.

Finally, I would like to just in conclusion indicate to you, Mr. Chairman and the members of the committee, that NASAO is enthusiastic about a true Federal-State partnership and we certainly stand ready to answer any questions that you may have.

Thank you.

[The statement follows:]

STATEMENT OF
Kenneth A. Rowe, Director
Virginia Department of Aviation

President
National Association of State Aviation Officials

Mr. Chairman and Members of the Subcommittee:

NASAO welcomes the opportunity to appear before you today to provide comments on legislative proposals to reauthorize the airport and airway trust fund programs. I am Kenneth A. Rowe, President of the National Association of State Aviation Officials and the appointed Director of the Virginia Department of Aviation. With me are Leslie Dawson, Secretary of Transportation for the State of Kentucky, Gina Marie Lindsey, Manager, Statewide Aviation for the Department of Transportation and Public Facilities of Anchorage, Alaska and Alaska's representative to NASAO; and Robert T. Warner, Executive Vice President of NASAO.

Mr. Dawson serves as the Chairman of the American Association of State Highway and Transportation Officials (AASHTO) Standing Committee on Aviation and is available to respond to any questions concerning the AASHTO policy on the Airport and Airway Programs. AASHTO supported State administration of federal airport grants to all airports other than major hubs in 1980. That support is even stronger in 1987. The National Governors' Association also supports State administration to smaller airports to take advantage of the technical and management expertise that exists at the State level.

NASAO's primary purpose as an organization is to foster and encourage cooperation between the States, as well as the federal and local governments in the development of an air transportation system that will be responsive to our nation's needs. Our individual members are charged with the responsibility of fostering, developing, and regulating aviation at the local and State level. In this capacity, the States have considerable responsibilities in airport system planning and development.

The task before this Subcommittee is considerable. NASAO looks forward to participating in the process of addressing this task and offers its services to the Subcommittee. The need to make some changes in the federal Airport Improvement Program is obvious; however, each user group seems to have a different idea as to what those changes should be. The perspective of the State government officials that have statutory responsibility to oversee the adequate development of State-wide air transportation facilities is also different. Ours is not a corporate, a user, or a taxpayer viewpoint. Ours is that of public officials who, like the Congress and the Administration, have a responsibility to recommend improvements that best serve the citizens.

NASAO has specific recommendations for a Post-1987 program based on a year's deliberations with State aviation officials and State Department of Transportation officials. These recommendations are based on a commitment of State DOTs that did not exist five years ago. They are based on considerable changes in the capability of States to play a more active role in the airport development process than five years ago. We believe that the facts support that more efficient planning and distribution of federal airport development funds can be accomplished by involving the States in the distribution process for all but the largest airports.

For example, in 1985 - for which the most recent data is available - only 17% of the general aviation airports in the national airport plan received federal funds. About 50% of the other commercial service airports and relievers were funded, while about 83% of the primary airports - the 280 largest airports - received benefits from the federal program. See Appendix A. Changes to the distribution system, utilizing existing State capability can improve this situation.

Our testimony is organized into several sections: a definition of the problems with the current program, the States' general policy on the Airport Improvement Program, NASAO's specific recommendations for the Post-1987 program, benefits of the NASAO recommendations and comments on the status of the Aviation Trust Fund.

CURRENT ENVIRONMENT IN FEDERAL AIRPORT IMPROVEMENT PROGRAM

- Many user organizations, as well as State and local governments, view the Aviation Trust Fund balance as a reason to *not* generate other airport capital improvement revenues. They simply wait for "federal money" to solve their airport needs.

- The huge federal deficit and annual appropriations process overshadows airport system needs. This has been seen time and time again as the needs (defined by the National Plan of Integrated Airports System, State plans, or industry surveys) continue to increase and the appropriations to meet these needs continue to be tangled in the web of the process.

- Additional duties have been piled on the FAA Airport Service personnel that has reduced their available time for grant processing. This has occured during the same time period when Airport Service staffing has continued to decrease.

- The environment of airline deregulation generated hub-and-spoke congestion, coupled with continuing noise problems nationwide are exaggerating capacity problems. Obviously, the effects of the airline industry changes, while studied considerably, are still in a stage of flux.

- There is not enough emphasis of the preservation of existing public facilities in a basically mature system of airports. For example, low-cost technologies are now available to all airports to assure responsible management of publicly-funded airport pavement.

- The need for more effective planning is greater than ever. Federal government must recognize the benefit of combining "bottom-up" and "top-down" planning.

STATE POLICY ON AIRPORT IMPROVEMENT

NATIONAL ASSOCIATION OF STATE AVIATION OFFICIALS - POLICY - REVISED SEPTEMBER 1986

Generally, NASAO believes that the development and preservation of a balanced system of airports which is responsive to the needs of all sectors of the nation is the mutual responsibility of federal, State, and local governments.

- The federal government's primary role should be to establish and maintain uniform standards that affect safety of airport operations.

- The States' primary role should be to promote and develop airport systems based on the plans that are integrated and coordinated with other transportation systems and plans.

- The local governments' role should be to implement and maintain airport development that is required to meet the needs identified by local, state and federal planning, with federal and state governments providing financial and technical assistance necessary for implementation.

The close cooperation of local, State, and federal governments should result in a clearly defined National Plan. This Plan should be based primarily on approved state, regional and metropolitan airport system plans and should be updated continuously as new information becomes available.

There should be a continuing federal airport planning and development aid program to help finance that portion of the airport/airway system which has been identified in the National Plan as being of national interest. Implementation of the Plan should be financed by aviation system user taxes and by general funds in consideration of the benefits derived by the general public from the air transportation system. Federal legislative authorization and appropriation amounts should be established at an annual level which will mandate disbursement of the Aviation Trust Fund to a minimum balance, allowing for continued full funding of airport improvements, as long as the need for such improvements can be demonstrated.

NATIONAL GOVERNORS' ASSOCIATION - POLICY - REVISED AUGUST 1983

> The importance of aviation to industrial and community development and the proven capacity of the states, working in conjunction with affected regions, to implement airport programs in a cost-effective manner are convincing reasons for a stronger state role. .. a state-administered block grant development program for smaller airports on a voluntary basis point toward a growing acceptance that states are in a better position to identify problems and develop solutions to a wide range of demand-capacity and safety-related concerns. Noting that forty-six states already provide state funds for airport development, the Governors urge Congress to apply the block grant concept to take full advantage of state technical expertise and management skill.

AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS
STANDING COMMITTEE ON AVIATION - POLICY - REVISED OCTOBER 1986

> ...airport improvement funds for other airports can be administered more efficiently at the state level and the funds can be used more effectively in response to state and local priorities.
>
> Grants and compliance programs for the second tier of airports, those with primarily state, regional or local significance, should be administered by states which are willing and able to do so, in accordance with an approved work plan.
>
> Basic federal policies and regulations would continue to apply to the use of these funds, but states would have maximum discretion in project selection and program priorities.

NASAO RECOMMENDATIONS FOR POST-1987 AIP

In support of its existing policy, NASAO recommends the following structure for the 1988-1992 Airport and Airway Improvement Program:

- User fees supporting the Airport and Airway Trust Fund should remain at 1982-87 levels and all trust fund revenues should be spent on development, operation, and maintenance of the Airport and Airway System.

- The new AIP law should be for a period of five years, so that airport sponsors and State agencies may coordinate projects for maximum efficiency and an assurance of continuity.

- Costs for preserving the existing Airport and Airway System should assume the highest priority for Trust Fund expenditures. Funding eligibility should be broadened to include facility preservation (maintenance), since the total airport system is reaching maturity.

- There should be a continuation of a dedicated set-aside to address noise problems. Beginning in 1988, $120 million should be provided for this purpose.

- A "Critical Capacity and Safety Fund" should be established for the Secretary of Transportation's discretion in confronting capacity problems nationwide. This Fund would begin at $240 million in 1988.

- Beginning in 1988, $100 million should be available annually in a Revolving Loan Account to fund advance land acquisition for future airport development at the discretion of the DOT Secretary.

- Prioritization and capital grants program administration for primary hubs -- the National System -- as well as the Noise, Critical Capacity and Safety and the Revolving Loan Programs should be assigned to the FAA.

- Funding for the remaining nonhub primaries and other commercial service, reliever, general aviation airports as well as aviation system planning -- the State System -- should be administered by the States *consistent with federal guidelines.*

- Funding for the Facilities and Equipment Program should be adequate to implement the National Airspace System Plan (NASP) by 1995, or sooner if technology and production schedules permit.

- Funding for the Research and Development Program should be sufficient to maintain the program at its current level of performance.

- Funding for capital improvements (exclusive of land purchases) should be available to privately owned, public-use reliever airports in the NPIAS.

- Funding eligibility should be expanded to include groundside as well as airside improvement projects, with conditions that the applicant must be the airport sponsor, and the project must clearly be related to airport access by air passengers.

- There should be a drawdown of the Trust Fund surplus. The majority of the surplus should be appropriated to fund improvements to the airport and airway system.

- The Airport and Airway Trust Fund should be removed from the Unified Federal Budget and exempted from budgetary limitations.

- The current penalty provision relating to FAA Operations and Maintenance (O&M) funding from the Trust Fund should remain in effect.

EXPANDED PROJECT ELIGIBILITY

Since the existing system of airports is reaching maturity, a new emphasis should be placed on preserving the existing transportation facilities. NASAO, therefore, proposes that the project eligibility for the Airport Improvement Program be expanded using specific criteria to include the maintenance of existing airport facilities. Pavement projects which are intended to preserve the existing airport facilities should be considered capital projects and therefore should be eligible for AIP funding, if the airport sponsor has demonstrated responsible management techniques through approved pavement management programs.

At present, airport ground transportation access is a deterrent to efficient airport operation at a number of airports. To respond to increasing groundside problems affecting airport access, NASAO proposes that funding eligibility be broadened to include groundside improvement projects. Allocations should be made with the conditions that the applicant must be the airport sponsor, and the project must clearly be related to airport access by air passengers.

NOISE

Because noise problems may work to constrain the continued growth of an efficient National Airspace System through a patchwork of noise restrictions, NASAO proposes that there should be a continuation of a dedicated source of funds to address noise problems.

Beginning in 1988, $120 million should be provided for this purpose. It is necessary to earmark specific funds for expensive noise problems so as not to deplete other categories of funds with the Aviation Trust Fund. The noise fund should be available for use at any airport at the discretion of the Secretary of Transportation.

CRITICAL CAPACITY AND SAFETY PROGRAM

The FAA has estimated that 14 airports are now experiencing significant capacity and delay problems. In general, delays tend to occur at those few airports serving the majority of airline passengers, thus inconveniencing a large number of travelers. Further, congestion at a few hub airports can cause ripple effects throughout the air transportation system, resulting in delays in connecting flights to and from other airports. The cost of these delays are high in both airline dollars and in passenger time.

If the air traffic demand grows as has been projected, without remedial action, capacity constraints could affect almost all major airports by the end of the century. Therefore, NASAO proposes a new Critical Capacity and Safety Program be established to fund capacity improvements for any airport. This fund would be authorized up to $240 million annually and be disbursed at the discretion of the DOT Secretary.

REVOLVING LOAN ACCOUNT

NASAO agrees with the American Association of State Highway and Transportation Officials policy that the "States and the Federal government should recognize the importance of advance acquisition of land for future airport expansions. Limited resources, at both the state and federal levels, combined with rapidly escalating land costs, require the development of innovative financing measures for that purpose."

NASAO, therefore, proposes the establishment of a Revolving Loan Account funded at $100 million annually (FY 1988-92). This fund would be available for advance land acquisition for new airports and future airport expansions. This financing technique would be similar to the advance right-of-way acquisition revolving loan account in the Highway Trust Fund, which has been successful for several years. A number of States already have successfully implemented this mechanism within State programs. This fund would be disbursed at the discretion of the Secretary of Transportation.

AIRPORT CAPITAL IMPROVEMENTS

The Nation's largest airports - those within primary hubs - and the entire Airway and Air Traffic Control Systems have substantial national and international significance. The need for direct federal involvement at these airports, along with State involvement, is apparent. However, the States should assume a more appropriate role in the administration of programs for all other airports.

As evident in the administration of other transportation modes, State-directed programs that target the resources to the areas of greatest need make more efficient use of taxpayer funds.

NASAO estimates that a considerable amount user's funds could be saved with the States assuming a more appropriate role. This assertion is based on the grant delivery system capitalizing on the current capability of States and a reduction in the duplication of efforts by FAA Airports Services at the field level and the existing State activities. Further, savings would accrue from more efficient system planning. In addition, State administration of the Airport Improvement Program for nonhub primary, other commercial service, reliever and general aviation airports would allow States flexibility to focus resources on State and locally determined priorities that better serve the interests of the Nation's citizens.

NASAO, therefore, proposes a reorientation of the Federal Airport Improvement Program into "National" and "State" Systems. The National System would include primary hub airports (about 150). The State System would include the remaining nonhub primary and other commercial service airports (about 400), reliever airports (about 225), and general aviation airports (about 2500).

NASAO further proposes to fund the total airport program at $1.4 billion in 1988, with 4 percent annual increases through 1992. In FY 1988, $860 million would be administered by Federal government to fund primary hub airport improvements; and for airport capacity issues, advance land acquisitions for future airport development, and the noise program in both the National *and* State systems. The remaining $540 million would be allocated to the State System to fund nonhub primary, other commercial service, reliever, and general aviation airports.

The grant assistance program for the National System would be administered by the FAA under formulas and guidelines similar to those in the Airport and Airway Improvement Act of 1982. Because the total system is reaching maturity, a new emphasis would be placed on presentation of existing facilities. State input into the National System program would be provided through the State-administered State and metropolitan system planning process. Primary hub airport funding would be allocated using current enplanement formulas while Noise, Airport Critical Capacity and Safety, and Revolving Loan funds would be allocated at the DOT Secretary's discretion.

Funding for the the development of airports in the State System would be allocated to States based on the following:

1. Nonhub primary airport allocation to each State based upon current enplanement entitlements with a minimum of $200,000 annually for each nonhub airport.

2. Allocation for the other commercial service, reliever and general aviation airports would generally be the same formula as in the current (1982) program.

3. States should have discretion to adjust the funds available in each category, as long as at least 80% of the funds allocated to any one fund are spent in that fund.

4. Not more than 2 percent of each State's annual allocation (or a minimum of $75,000) would be available to cover each State's aviation system planning work.

States would have to meet eligibility criteria to be established by Congress and administered by the FAA as a prerequisite to receiving federal funds. To be eligible to administer federal funds, the State must have:

- an ability to administer the State aviation program;
- a DOT/FAA-approved airport system planning process, and
- a DOT/FAA-approved multi-year priority programming process.

Appendix B shows the proposed Federal Aviation Program Funding (Aviation Trust Fund) for FY 1988 through 1992. Appendix C indicates the distribution of the FY 1988 program, showing the percentage of each program in relation to the total expenditure from the Trust Fund. This chart shows that 58.5 percent of the Trust Fund would be earmarked for airport and airway improvements. Appendix B also shows the estimated Trust Fund revenues, projected by the General Accounting Office. The interest income is based on the Fund balance calculated at 10 percent per year.

FACILITIES AND EQUIPMENT / RESEARCH AND DEVELOPMENT

The need for enhancement of the entire air traffic control and airway system is unquestioned. The United States Aviation System is unsurpassed in the world. However, considerable research and implementation of facilities and equipment is mandatory to take the country into the next century. The National Airspace System Plan is a roadmap to that future. Congress should continue its funding of this ambitious task.

CONTINUED FUNDING FOR PRIVATELY OWNED RELIEVER AIRPORTS

Continued development of a system of reliever airports within metropolitan areas should be encouraged by all levels of government as a means of alleviating hub airport capacity and congestion problems. Recognizing the importance of privately owned, public-use reliever airports in reducing congestion at large air carrier airports, funding eligibility for capital improvements (exclusive of land purchases) should continue to include privately owned, public-use airports, as identified in the NPIAS.

CONTINUATION OF "PENALTY CLAUSE"

Once again in 1988, the Administration is asking for an elimination of the "penalty clause" to permit a higher level of O&M from the Trust Fund and an elimination of payment of interest on the Fund. While the use of the Trust Fund for some O&M expense is appropriate, there should be a continued inclusion of this clause to preclude the unlimited use of the Fund in this manner, when the intended purpose of the Fund is not met.

BENEFITS OF NASAO RECOMMENDATIONS

The main benefits that are derived from the NASAO proposal are related principally to improved efficiency, shifting capability and better planning.

EFFICIENCY

There are a number of efficiencies that can result when AIP grants for smaller airports are administered at the State level. The workload of grant processing is spread among a greater number of employees without hiring additional personnel while allowing federal employees to concentrate on other important tasks. Also, State officials can conduct inspections while visiting the airports on other business. The reduction of waste through consolidation of these efforts is obvious.

State administration of federal AIP grants for all but the designated small, medium and large hub airports, if effectively managed, will result in savings of taxpayer dollars in a number of ways.

First, *it will eliminate current, unnecessary duplication of work* by different levels of government. Many States are already participating in the process of federal funding through State channeling acts. Most States administer State funding programs. Since these States have these services available, the FAA staff could better perform their primary tasks - promotion of safety and oversight of certification and regulatory requirements.

Specifically, most States currently process paperwork to administer the State portion of Federal/State/Local projects. Meanwhile, an overworked Federal employee is somewhere processing the paperwork for the 90% Federal money. Why aren't we smart enough to create a Federal-State distribution process that has one person, rather than two, doing this work? If the State employee were doing the processing (for certain categories of airports) -as has been the case in the Federal highway program for decades - then the Federal employee would have more time for national planning and regulatory/enforcement obligations.

Further efficiency could result from coordinating and combining federal and State planning and construction projects. This has been proven for years in federal/State highway programs. If a State could coordinate material ordering for several projects, a significant dollar savings could be realized. Seasonal bid-cost cycles (timing contract bids to take advantage of slow construction seasons) could be predicted and project costs could be greatly reduced.

A March, 1985 report to the Congress by the Comptroller General (GAO/HRD-85-36) concluded that "block grants provide the greatest opportunity for better coordination with State activities where States have had substantial involvement in prior federal categorical or related State programs. In these cases, State rather than federal policies provided the management framework, *permitting various improvements and simplifications*."

Greater efficiencies could also be accomplished by State project-funding programming. Already in use by several of the States, funding programming is a method which allows operators to plan into the out-years for a particular project. Once a project is placed on the programming grid, its place in line for funding is assured. Even though there may be a small adjustment for funding changes, the project retains its place in line for the next available funds. This means the sponsor only has to go through the planning and application procedures for a particular project one time, rather than applying for funds year after year. The operator also saves money because peripheral system development, such as landing aid procurement, can be scheduled in a coordinated manner saving time and money.

This compares with the current federal process, that has the airport operator attempting to plan for the funding and construction of a project with the considerable uncertainties of federal funding flow. The local airport operator and the State system planner spend their days awaiting the Congressional appropriations process, and the resultant reshuffling of available federal funds through three layers of FAA structure.

The Nation is confronting an increasing need for planning and development of new , improved air transportation facilities that will meet new demand created largely as a result of deregulation at a time when budget problems are forcing the federal government to cut back where possible. The States present an effective solution to this dilemma, but are they capable?

CAPABILITY

States are well equipped to manage substantial aviation programs. The increase in State capability has been documented, particularly in the last two years. In 1978, four states conducted demonstration program for State administration of Federal Airport Development Aid Program. Evaluation audit by DOT and FAA stated that the program was a success.

In 1985, the American Association of State Highway and Transportation Officials adopted a national policy favoring State administration of the AIP. This support at the State DOT level assures multi-modal coordination and synergy of DOT facilities, skills and manpower. States are better able to implement five year capital improvement programs (required by law in many

States) that are based on State aviation system plans and are coordinated with the Federal National Plan for Integrated Airport Systems. Efficiency of coordinating and combining Federal and State planning and construction projects has been proven for years in Federal/State highway programs.

Those States that require channeling of federal project funds currently have qualified personnel dedicated to these requirements. Many States already participate in the administration of the federal program since State law mandates the State to act as an agent for the airport sponsor. Of course, further State capability exists in the form of personnel assigned to State grant program administration.

Most States have experience as contractors to the Federal government in the collection of airport safety data. This program includes airport inspection responsibilities, and is best suited for the States because of similar State responsibilities for airport and aviation system oversight.

In mid-1986, NASAO conducted a survey of State capability in each of ten functional areas. In seven of the functional areas studied, 94% of the States (or greater) were able to provide the necessary resources. These seven areas included: administrative staff, regulatory matters, policy, engineering, planning, public information and accounting/statistics. In the remaining three areas, approximately 75% of the States could provide the needed service. Additionally, this study compared responses to the size on the aviation agency staff and concluded that, "there is no evidence to support a contention that the capability of a State to provide aviation programs is determined by the current size of a particular State's aviation agency. There was no difference between the resources available to 'small' versus 'large' agency States."

Recently, the NASAO Center for Aviation Research and Education conducted a comparison study of State airport planning and development personnel and FAA Airport Services field staffing. The study revealed that States are more capable than ever of administering and processing airport grants and that the FAA is in greater need of help. In fact, the number of States employees has now surpassed the FAA field staffing. See Appendix D.

The study tallied State personnel full-time equivalents responsible for: Planning (including Aviation System Planning, Noise Planning, Economic Development Planning, Technical Assistance on Airport Master Planning); Airport Improvement/Construction; Grant Administration (State or Federal Programs); Airport Permit or Licensing; and Airport Inspection (including 5010 inspection). These positions have increased 15% since 1976 from 494 to 569. The FAA number reflecting airport field personnel decreases during the same time period, showing 388 in 1986. This is down 36% from 603 in 1976.

During this same time period, the FAA airport grant project workload substantially increased. Open projects numbered 1,909 in 1976, 3,308 in 1981 and 4,372 in 1986.

The trend towards greater State capability compared to the drastic *decrease* in FAA field staffing and the tremendous *increases* in grant processing demand since 1976 underscores the necessity for the federal and State governments to utilize their combined resources for the planning and development of airport systems nationwide.

States will be able to mesh the traditional tools of planning with new analytical tools (such as computerized pavement management programs) to better identify to all levels of government the needs of their systems. Pavement management, for example, is being used by many States to identify to federal, State and local decision makers the most efficient use of resources to maintain the pavements of our airports, just as for our highways. The ability to put this type of planning tool to work delineates the capabilities of State governments.

Clearly, the opportunity for a new direction in airport development is available to us today. For those in government, the challenge is to manage this change so as to make maximum use of our collective financial and human resources in providing a safe and efficient air transportation system for the nation.

PLANNING

Planning is the cornerstone of an effective, coordinated air transportation system. The federal, State and local governments all carry a part of the planning responsibility. Unfortunately, the federal government is not designed to effectively oversee *all* long-range system planning and program direction for both the primary airports as well as the smaller commercial service, reliever, and general aviation airports. However, the federal government *does* have an important role in the process to *assure a nationwide system.*

The release of the Administration's proposal for a two-year re-authorization program has provoked concern by airport operators and State officials alike. This concern spurred a review by the NASAO Center for Aviation Research and Education of funding levels as intended by Congress under the current law and those actually spent in the most recent year; and an analysis of the Administration and NASAO proposals. State officials believe that planning has been underutilized during the current program. See Appendix E. For example, only $6.8 million of the $9.1 million appropriated in 1985 was spent. NASAO has recommended a percentage of the State-administred federal grant program be for aviation and airport system planning. The Administration proposal obviously de-emphasizes planning, with a maximum of $4.3 million permitted for planning, if *all* States opted into the program.

The planning function integrates the appropriate role of State government in land-use planning, zoning and tall-structure ordinances. These functions are appropriately best accomplished at the State, regional and local level and are essential to the adequate development and preservation of the nation network of airports. Further, the most successful development of military joint-use facilities is accomplished through strong State planning efforts.

One barrier to effective public works planning and implementation at all levels of government may be attributed to the policymakers overlooking the need for orderly system planning and attempting to deal directly with local situations by the "squeaky wheel" method. What is needed is a wider recognition by the FAA that something is missing and that a program driven *only* from the "bottom up" by short-term projects or *only* from the "top down" by national perspective will not lead to a well integrated, timely, effective national system of airports.

With its airport system development emphasis focused on project-related matters, the long-range planning of the system has suffered. A new direction is needed. Both "bottom-up" *and* "top-down" planning is required. A "full partnership" in planning is needed. It is the State and local governments that are best equipped to address the issues of their regions, including the political, social, economic, and demographic incentives to implement solutions. It is these levels of government that are close enough to the problems to effectively monitor progress and discover when a new emphasis is required. The federal government meanwhile should establish national standards and provide national and international planning perspective.

REMOVAL OF TRUST FUND FROM THE UNIFIED BUDGET

At the current rate of collection and spending, the General Accounting Office (GAO) is projecting an unused balance of $12.4 billion in the Airport and Airway Trust Fund by the beginning of fiscal 1991. At the same time, there has been a continuing trend to reduce the proportionate share of Trust Fund monies appropriated for capital airport funding. Proposals to decrease the unused balance, such as increasing the percentage of FAA's O&M costs from the Fund, represent a shift from the Fund's primary mission.

Taxes collected from the system users and placed in dedicated trust funds should be promptly and fully used to accomplish the purposes for which they are collected. This is particularly important since the federal government, unlike State government and the private sector, does not have separate operational and capital budgets. In addition, interest which accrues to trust fund monies is an integral part of that trust fund and should, along with the trust fund monies, be dedicated.

To ensure that Airport and Airway Trust Funds are appropriately allocated, NASAO recommends there be a drawdown of Trust Fund surplus which provides for an appropriation of a majority of the surplus to fund airport and airway improvements over a five-year period. That portion of FAA's O&M funded from the Trust Fund should not exceed 134 percent of the airports program.

While NASAO is fully sympathetic to the plight of the federal deficit, it is also believed that the user financed Trust Fund should not be held hostage to the Unified Budget problem. Under the present budgetary process, trust funds are subject to annual budget resolution approved by Congress. They are also subject to an expenditure ceiling device used to limit the overall budget levels.

Consequently, the capital program improvements envisioned and used as the basis for enacting the user fees in the first place have suffered from substantially reduced financing. Programs financed through dedicated funds, the user fee system, do not add to the overall deficit since they are not part of the general revenue.

NASAO urges this Committee to examine the user fee mechanism and remove these dedicated funds from the Unified Budget process and exempt the Aviation Trust Fund from budgetary limitations. Those who pay user fees should be guaranteed that the funds are allocated and used for the programs for which they are intended, without restrictions or fiscal limitations.

CONCLUSION

NASAO is very enthusiastic about the development of a true federal-state partnership which will enhance the nation's air transportation system. It is our sincere hope that our proposal illustrates our dedication and commitment towards these goals.

We recognize that our role depends on stringent federal oversight and that we look to you for that guidance. We also realize that together we can successfully utilize our combined resources to increase the safety and effectiveness of our air transportation system.

Thank you very much for the opportunity to express our views on this legislation.

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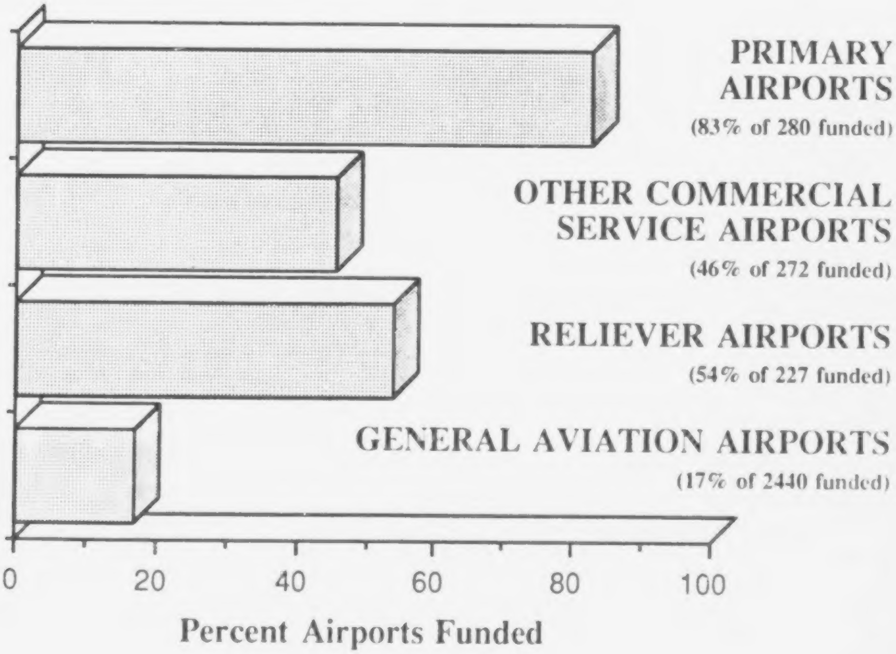
EXHIBIT A

PERCENTAGE OF AIRPORTS IN NPIAS RECEIVING FEDERAL FUNDS IN 1985



Source: Federal Aviation Administration

EXHIBIT B

ESTIMATED AIRPORT AND AIRWAY
TRUST FUND SOURCES AND PROGRAM FUNDING LEVELS (1,2)
($ MILLION)

SOURCE/PROGRAM	FY 1988:	FY 1989:	FY 1990:	FY 1991:	FY 1992:	FY88-FY92:
SOURCE						
PAX TICKET TAX:	2,967	3,133	3,385	3,650	3,948	17,083
FREIGHT BILL TAX:	172	187	202	217	235	1,013
INT'L PAX TAX:	172	187	202	217	235	1,013
AV FUEL TAX:	172	187	202	217	235	1,013
INTEREST:	650	550	445	330	220	2,195
SOURCE SUBTOTAL	4,133	4,244	4,436	4,631	4,873	22,317
PROGRAM						
AIRPORT PROGRAMS:						
1.) Primary Hubs (3)	-400	-420	-440	-460	-480	-2,200
2.) Noise	-120	-125	-130	-135	-140	-650
3.) Critical Capacity	-240	-245	-250	-255	-265	-1,255
4.) Revolving Loan	-100	-100	-100	-100	-100	-500
5.) Nonhub, Com Ser, GA, Rel	-540	-565	-590	-620	-645	-2,960
FACILITIES & EQUIPMENT:	-1,600	-1,660	-1,730	-1,800	-1,870	-8,660
RESEARCH & DEVELOPMENT:	-250	-250	-300	-300	-300	-1,400
OPERATIONS & MAINTENANCE (4):	-1,875	-1,950	-2,025	-2,105	-2,180	-10,135
PROGRAM SUBTOTAL	-5,125	-5,315	-5,565	-5,775	-5,980	-27,760

Note: Deficit for 5-year period indicates a drawdown of the existing Aviation Trust Fund balance.

(1) Source: U.S. General Accounting Office Report on Aviation Trust Fund (ATF).
(2) Proposed funding levels anticipate 4% annual inflation rate (except Revolving Loan).
(3) Allocation based upon current entitlement formula using estimated 1987 enplanements.
(4) O&M Program funding level equals 134% of airports funding level which is consistent with the current Act for FY 1987.

EXHIBIT C

PROPOSED PROGRAM FUNDING (FY 1988)

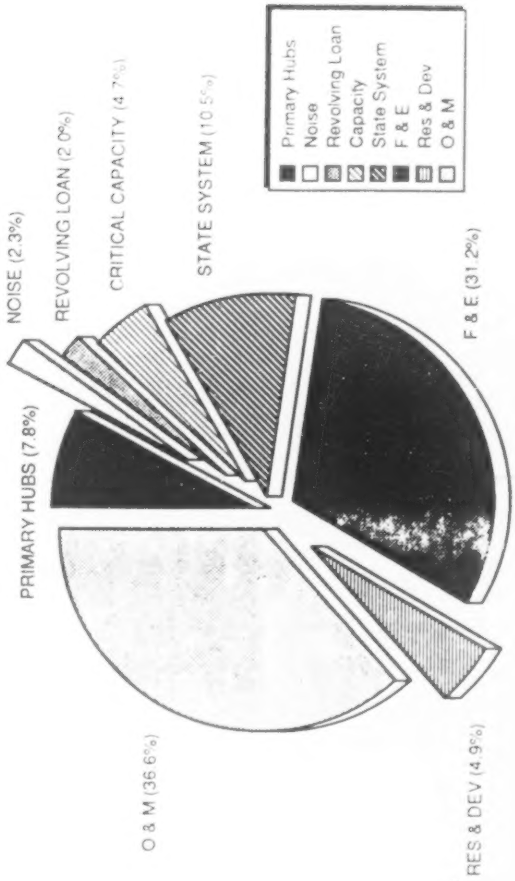
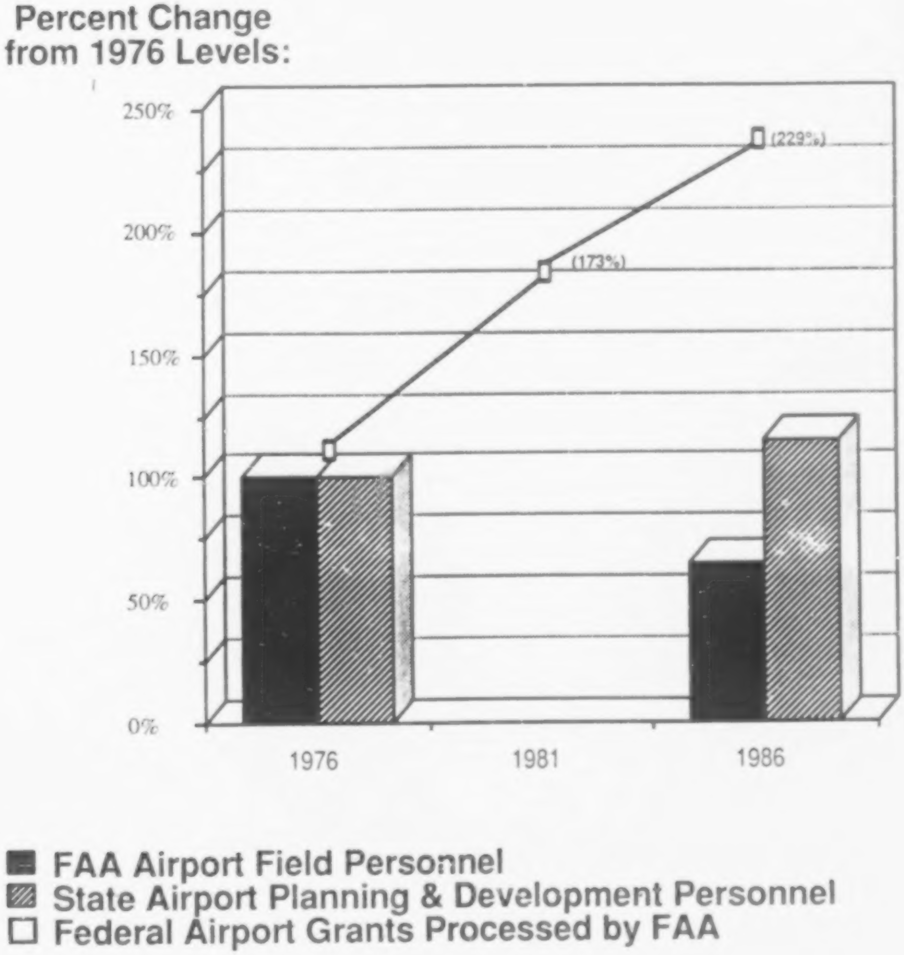


EXHIBIT D

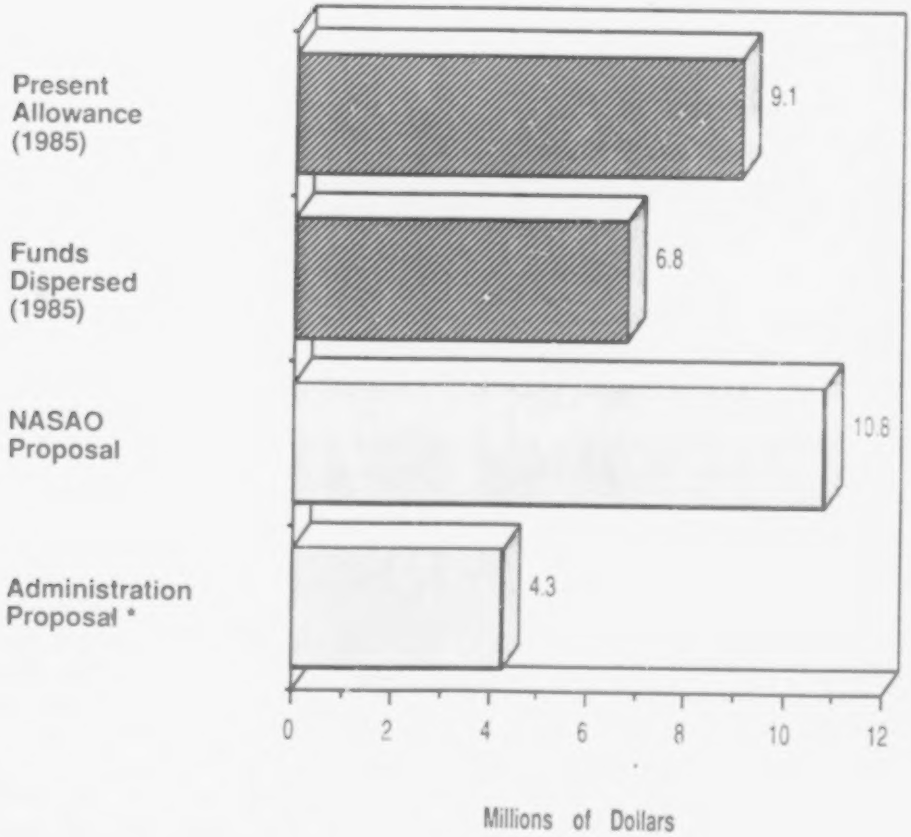
PLOT OF FAA AND STATE MANPOWER VERSUS FAA GRANT PROCESSING DEMANDS



Source: FAA and the NASAO Center for Aviation Research & Education

EXHIBIT E

COMPARISON OF FEDERAL AVIATION SYSTEM PLANNING SPENDING



* "No specific funds are earmarked for airport planning, however, system planning can be accomplished from State Block Grant Funds [Max 2.5% per State allocation]."

Senator FORD. Thank you, Mr. Rowe.

I do not know whether to give this question to you or to Secretary Dawson. How many States now have programs in place to administer AIP grants?

Mr. ROWE. Mr. Chairman, I would estimate from our figures that there are 42 States that currently have——

Senator FORD. How do you estimate that? If I was against it, I would estimate it to be about five or ten States.

Mr. ROWE. All right, sir. These are States that have in place grant programs from existing State revenue sources and are administering a State grant program for State funding at the present time, and there are 42 States that are in that category.

Senator FORD. How many new employees would you think would be needed in a State, say like Kentucky to administer the increased burden of State grant programs? Les may be able to answer this question.

Mr. DAWSON. I think in Kentucky we could probably handle it with what we have at the present time, three or four employees.

Senator FORD. Anybody else?

[No response.]

Senator FORD. Alaska is unique. You own all the airports up there, do you not?

Ms. LINDSEY. Thank you for saying that for me, yes.

Senator FORD. You are always unique. You are excluded from deregulation, you are excluded from the interstate highway program.

Ms. LINDSEY. But to answer your question, Senator, we would need to add no capabilities to what we already have in Alaska.

Senator FORD. You would be the unique one of the bunch, I would think. And of course, you are the unique one at the table there, too.

Ms. LINDSEY. Thank you.

Mr. COOK. Senator, in New York the practicalities of the existing manpower shortage in FAA requires that—we already do it with our existing staff. For the type of program that the administration is proposing, we already prioritize such projects in the State.

We prepare the list and give it to the FAA. They agree or disagree with the list, but we come to an agreement as to which projects will be funded. But they legally have to issue the grants. So there is no problem with staffing. In fact, it is a staff duplication right now, and if we were given the grant authority we would save some manpower, not add more manpower.

Senator FORD. Well, how much could we reduce from FAA's payroll and put it into airport improvement?

Mr. COOK. I personally would not recommend any reduction in FAA's manpower. I agree with some of the colleagues from earlier testimony. We have a major national airport problem to solve. We need to put the FAA manpower where it can be useful in solving the national airport problem.

This partnership of the State and Federal government is absolutely essential at this point, unless you would like to double the size of the FAA airport staff. A simple thing of having the State administration block grant provides an additional State resource to the Federal government. That partnership would allow the States to take care of one part of the system while the FAA takes care of the major national system.

Senator FORD. Do you think many of us up here are going to give this to the States, when they can already deal directly with their Congressmen. I do not know how many you have from your State; about 40?

Mr. COOK. 40 some odd.

Senator FORD. So you think they are going to give that to the governor or the State office, when they can deal directly with their 40 some odd Congressional districts and the communities in their districts?

Mr. COOK. Well, Senator, in my———

Senator FORD. I am talking about being practical now.

Mr. COOK. I am being practical.

Senator FORD. You are apparently a practical official. You have to be practical.

Mr. COOK. Absolutely. And since I put up 75 percent of the local funds, they have to come there, too. So it is politics both ways.

Senator FORD. You put up 75 percent of the local funds?

Mr. COOK. Yes, sir.

Senator FORD. The federal government just puts up 25 percent?

Mr. COOK. No, FAA puts up the 90 or the 75 percent and, the State and locals put up the balance. So that the local level is only at maximum 6.5 to 2.5 percent.

Senator FORD. I think most States do that. The federal government puts up 50, the States 25, and locals 25. The formula is different all over and the mix is different all over, is it not?

Mr. COOK. Yes and that brings us back to the basic issue, Senator. The FAA/State partnership already exists and it is not a duplication of effort at all or an extra level of bureaucracy. We are already involved.

Senator FORD. Well, there is some difference of opinion, and I have a little different opinion than you do.

Other concerns that we hear is that allowing States to administer the Federal funds creates the extra level of bureaucracy. Mr. Rowe, do you want to refute that?

Mr. ROWE. Yes, sir. I would like to address that. Of course, I am from the Commonwealth of Virginia and we in Virginia do not consider ourselves as an extra level of bureaucracy. We already exist. We have a $13 million annual program for State aid to airports in Virginia, in concert with the Federal program.

And these combination of efforts that we are already administering in the airports in Virginia are already the recipients of a combination of Federal and State, and we do not see it as an additional burden. We see this as part of the ongoing effort, and we can fill a void and prevent some of the redundancy in the smaller airport grant program from the Federal level.

Senator FORD. Something just does not ring right with me on this. I guess I will figure it out. You have got a program now, you have got an ongoing partnership. I do not know why you want to change it. Everybody says how great you are and that everything is going along fine. Why all of a sudden do you want block grants and it give it to the State?

I see the smoke, but I have not seen the flames yet.

Mr. Rowe. Thank you, Mr. Chairman, for mentioning that, because it is very true, we do have a good program in the administration of the present system that is working in those areas. What we are saying is there is redundancy there, and with the continual decline in people at the Federal level to do this job and with the needs of the States and the economic development and direction that individual States go, we feel that we can direct those dollars to the smaller airports in a more efficient and effective manner than is currently being done.

And we think that that is going to be an improvement for the overall national system.

Senator Ford. Well, I understand. I have been Governor and I have appointed aviation people. I expected them to do what I told them to. They did, and they did it pretty well. In fact, they even gave letters of credit for the next year, you know.

I have watched all that go on, so you are not telling me something I don't know. I understand what is going on in the State pretty well, and I can understand why you want that block grant. I am not sure I want to give it to you now.

Mr. Rowe. The block grant term, Mr. Chairman, if I might, of course is the administration's proposal, and they call it a block grant.

Senator Ford. I am on the other side sometimes. I would like for you to get more money and they do not want to give you any more, so that puts us on opposite sides.

Senator Kassebaum.

Senator Kassebaum. Mr. Donahue testified for the Federal Aviation Administration earlier that he thought there were only, I think, about 20 States which could meet the criteria to be included in the block grant funding.

Would you comment?

Mr. Rowe. Yes, Senator. I heard him say 25 States approximately, and I am aware of different levels at different States. My number of 42 are the 42 States that have State funding programs that they are administering at the present time.

All of those would not be available and ready to take on this type of program administration initially. But we believe that over a period of years it would help strengthen those States that are less strong, and eventually that it could be across the country.

Senator Kassebaum. It seems to me that an enormous amount of paperwork could be involved in determining the criteria as laid out by the administration for States that could comply and thereby qualify for State block grants.

For instance, they must have an airport planning process consistent with criteria prescribed by the Secretary of DOT, States must use a programming process acceptable to the Secretary of DOT, the State must agree to comply with any administrative requirements developed by the Secretary of DOT to carry out the program, and so forth.

Somewhere along the line, somebody is going to have to do an awful lot of paperwork and analyzing and designating.

Is this process pretty much in place, for instance, in Virginia, so that with a little effort you would be able to do all of this?

Mr. ROWE. Yes, ma'am. We do in Virginia at the present time work with the sponsors of all airports where we have a State share, and that is all of the projects that go forward to the Federal for projects, and we are a channeling State. So that we are currently involved in the paper process in the Commonwealth.

Senator KASSEBAUM. As you have analyzed the work that you have done, would you or any of the others here have any recommendations to make as far as any improvement in the criteria process, perhaps, or any changes that you think would be beneficial?

Mr. ROWE. I wonder if I could ask Clarence Cook to respond, Senator. He has been with us for many years in the capacity of Director in New York, and they have been involved in the State program.

Mr. COOK. Senator in speaking for New York and probably for those other 25 States that I do know fairly well, our agencies and staffs are well known to the FAA staff. FAA has been funding continuous planning to most of these States for a number of years on an annual basis.

Therefore, the planning and programming criteria have already been set up. The assumption I am making is that it would not be too different than what FAA has been making us go through anyway for the last, in New York at least, ten years now for continuous planning, and for system planning and master planning efforts.

We are working very closely with FAA on this program already. I would say most of the FAA airport district offices have a very good working relationship and know our State agencies very well. Therefore, I am not concerned about the paperwork.

Yes, there will be some paperwork that will have to be done, but most of us belong to DOT that handles a highway program and are used to Federal criteria and standards. If the effort is made, it can be done fairly simply.

Senator KASSEBAUM. And in your capacity in New York, you are responsible for coordinating the work of the large airport authorities, as well as the smaller reliever airports and general aviation and so forth?

Mr. COOK. Yes, Senator.

Senator KASSEBAUM. So as you lay out your whole program, it includes everything?

Mr. COOK. Yes, Senator. In New York we have a law that no Federal application can go forward from any airport or any transportation facility without it first being approved by our commissioner of transportation as being consistent with our statewide master plan for transportation.

We have a coordinated and integrated transportation master plan in New York.

Senator KASSEBAUM. Do all of you have that who are speaking here today?

Mr. DAWSON. Yes.

Ms. LINDSEY. Yes, we certainly do in Alaska. As Senator Ford pointed out, we wear both hats already. So there would be no additional paperwork, no additional requirements for planning that we do not already perform.

Senator KASSEBAUM. Well, providing that the same criteria that exist today would be laid out, I assume, by the Department of Transportation?

Ms. LINDSEY. Yes, providing that.

Senator KASSEBAUM. Thank you, Mr. Chairman.

Senator FORD. Mr. Rowe, how many States could have testified today that might have objected to this block grant? You know, you are the only one up there, and so I just wondered if you are being fair with the committee.

Mr. ROWE. I think, Mr. Chairman, we have been as fair as we can. I do not know of a State that would testify against the block grant program.

Senator FORD. Well, let me just say, you have got my good friend sitting to your right and it is hard for me to object to what he says. Of course, I understand the situation in the Commonwealth of Virginia very well. You have the young lady to your left that has a unique situation where Alaska owns all the airports, and then you have probably got the best organized and administered situation in New York.

I have wondered about some of these other airports, where they just have one person that is assigned to the aviation department. I just wondered about that. I am not objecting to what you are trying to do and I understand that very well.

However, I also know that there is a hole here that we need to cover up a little bit. There are a good many States out there that have very few employees that can administer what you all do on a very practical and well organized way.

Mr. ROWE. Mr. Chairman, I do not know of a State that would vote against it. There are some States that could not assume that responsibility at this time if it were passed today or tomorrow or with this reauthorization. But eventually, I believe that all the States would and could. And I believe that eventually to have a stronger State role is going to benefit the national system countrywide.

And I think it is coming to this, the same as we have a highway department in every State working on highways. Mr. Chairman, I think aviation is going to come into its own, and we are going to be stronger as a result.

Senator FORD. Well, you talk about highways and I know something about spreading blacktop. We had a governor in Kentucky one time that before election time spread blacktop, but it was so thin a fat man on a bicycle would go through it.

What I am trying to stress is you will be increasing the cost of State government. Those who are not now spending that kind of money are going to be asking for an agency and for more employees.

Then the State legislature is going to be asked for more money, and then you are going to be asking for more taxes. I think I can see that you are on a roll, and that roll may not be in the right direction.

Mr. ROWE. Mr. Chairman, I would say that all States today have an aviation interest or an office or in some way.

Senator FORD. If they are part of the Union, we know that.

Mr. Rowe. That is correct. And then what I am saying is that they do have today people involved in aviation through DOT, through other State resources presently. And I would see that there would be some increase in some areas of some States, but generally speaking not in the majority in any way, shape, or form.

Senator Ford. Thank you, Mr. Rowe. We got it out on the table, did we not?

Mr. Rowe. Yes, sir.

Senator Ford. Good.

Thank you all very much. I appreciate your coming.

I am going to ask the next three people to join each other at the table. We will have: General Bolger, who is President of the Air Transport Association; Doyle Cloud, Jr., Vice President, Regulatory and Government Affairs with Federal Express; and Ralph E. Leonard, Chairman of H.E. Sargent, Incorporated, Stillwater, Maine, representing the Associated General Contractors of America.

I would like to have all three of you as a panel. Mr. Bolger, we will let you go first, then Mr. Cloud, and then Mr. Leonard. And if we could hold it to five minutes, I would appreciate it.

STATEMENTS OF WILLIAM F. BOLGER, PRESIDENT, AIR TRANSPORT ASSOCIATION; A. DOYLE CLOUD, JR., VICE PRESIDENT, REGULATORY AND GOVERNMENT AFFAIRS, FEDERAL EXPRESS; AND RALPH E. LEONARD, CHAIRMAN, H.E. SARGENT, INC., REPRESENTING THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA, ACCOMPANIED BY VALENTIN RIVA, HIGHWAY DIVISION ASSOCIATE DIRECTOR

Mr. Bolger. Thank you. I appreciate the opportunity to present our views in what clearly is the most crucial issue facing aviation today, the future of our national airport and airways system. Your actions will help determine just what kind of future lies ahead for this nation's aviation system.

My full statement covers the broad range of issues involved, but I will just briefly state to you our concerns.

Senator Ford. Your full statement will be included in the record.

Mr. Bolger. Thank you, sir.

All of us responsible for providing a safe and efficient national aviation system face a tremendous challenge: How do we get the system ready for the future? Last year, U.S. airlines safely carried some 415 million passengers, more than 50 percent greater than the 275 million carried in 1978. We will exceed 600 million by 1990.

The industry now also employs some 412,000 men and women, a record number, up significantly from 1978's 329,000 employees. The opportunities unshackled by deregulation, while not completely realized, are obvious. Today almost three-quarters of the adult U.S. population has flown. Clearly, air travel has become more accessible, more affordable for the average American.

90 percent of all passengers now fly at a discount fare, averaging 60 percent off the full fare, saving passengers billions of dollars a year and providing a way for many more Americans to fly. Entire industries and segments of the U.S. economy depend upon safe, reliable, and efficient air transportation.

The system must meet the demands of the nation. This nation cannot be restrained by an inadequately funded or poorly organized system. It is crucial, then, to meet the challenges now confronting us in aviation. Those challenges are considerable.

That is, to provide the public with a system of airports and airways that is safe, that meets the nation's demand for capacity and efficiency, and is flexible enough to keep pace with the deregulated, competitive, dynamic air transportation system.

We do not now have an organization and infrastructure that can successfully meet today's demand while simultaneously planning to meet tomorrow's. We are not structured to be ready for the future. The evidence of this shortcoming is the fact that we are back here in 1987 debating issues that were resolved in 1969 with the development of the high density rules, that were resolved again in 1970 with the establishment of the aviation trust fund, and that were resolved once and for all in 1982 with the NAS plan, the most recent trust fund authorization.

American air transportation needs better resolution of its problems. Reauthorization of the status quo will not prepare this nation for its future. The existing structure is not equal to the task at hand today, nor will it be equal to the challenges of the future.

In recent years there has been extensive Congressional attention to airport, airway problems, as air travel frustrations have mounted because the system is still plagued by the same problems that have existed for years. I am struck by what I believe is the universal theme on which we all agree, that the aviation trust fund is broken and we need to fix it.

Moreover, I think we all agree that it is the aviation infrastructure itself which is not meeting the needs of any user group in the private sector. Other user representatives are here, just as ATA is, to tell you those two things.

In the last two years, the ATA member airlines have analyzed the causes of these problems in order to find solutions. Their ability to do business in this country safely and efficiently, while meeting public demand, is simply put in jeopardy.

Five more years of the status quo is unacceptable to any of us. The deficiencies of the current structure are legion, but they fall essentially into three categories of constraints: funding, personnel, and procurement. One affects the other. Individually each is difficult, but together they create an impossible environment in which to sustain the kind and quality of national air transportation system this country wants and needs today and tomorrow.

ATA has proposed, as many of you know, a better way to fund and manage today's system while planning effectively for tomorrow. Our proposal, which we call a national aviation authority, would be a new Congressionally chartered government corporation that would be self-sustaining through user fees and would be free from any of the stifling government constraints on personnel and procurement, but maintain Federal government control of vital safety functions.

A corporation wholly owned by the Federal government can be established with the attributes and authorities of a commercial enterprise. There is ample precedent for such a step.

The flexibility of the Federal corporation approach will permit correction of the generally recognized problems that plague the system. Three primary and far-reaching changes are essential:

First, the revenue stream must be redirected from the tax receipt flow, with subsequent lengthy appropriation action, to the user fee stream flowing directly without restriction to the air traffic control agency, with authority to adjust the rates as required to meet the justified need.

Second, the air traffic control agency must be free from inflexible civil service laws and regulations governing hiring, compensation, benefits, and other terms and conditions of employment.

Third, the agency must have the authority to contract for equipment and facilities in accordance with accepted commercial practices and to adopt, amend, and repeal such rules and regulations as necessary to accomplish this purpose.

We are not suggesting that the NAA proposal is the panacea to all the air transportation problems, but we think it goes the farthest in meeting both present and future needs. Meeting the needs of the national air transportation system is a tall order, but certainly not an impossible one. We cannot be content with the status quo.

We have the resources and the technology. We need only the desire and the drive to make the American aviation system what it should be—a system to meet the needs of the nation for the next decade and into the next century.

Thank you, sir.

[The statement follows:]

STATEMENT OF WILLIAM F. BOLGER, PRESIDENT, AIR TRANSPORT ASSOCIATION

Good morning, ladies and gentlemen. My name is William Bolger, and I am president of the Air Transport Association, which represents U.S. scheduled airlines. I appreciate the opportunity to appear here today to give the committee the views of the airline industry on what clearly is the most crucial issue facing American aviation today—the future of our national airport and airway system. The actions of this committee and its counterpart in the House will help determine just what kind of future lies ahead for all of aviation in this country.

The issues involved here are not lightly taken and our positions on those issues are not lightly held, for we in the airline industry have concluded that we are at a turning point—a point in history when decisions we make and actions we take will have a profound influence on the very essence of air transportation from now until well into the 21st century. Mr. Chairman, the success or failure of our work together during this Congress will live long into the future. A tremendous challenge has been given and we must respond.

Earlier, I mentioned that we were at a turning point. Actually, air transportation in this country began to undergo significant, positive changes at the end of the last decade when Congress passed the Airline Deregulation Act. Beginning in 1979, the antiquated economic restraints on air transportation were lifted and what has emerged is a safe, healthy, growing, dynamic industry.

Last year, U.S. airlines safely carried some 415 million passengers, more than 50 percent greater than the 275 million carried in 1978, the year before deregulation took effect. This year, we'll probably carry close to 450 million. The industry also now employs over 412,000 men and women; up significantly from 1978's 329,000 employees and, in fact, more people than have ever been employed before.

The opportunities unshackled by deregulation, while not completely realized, are obvious. Today, almost three-quarters of the adult U.S. population has had the opportunity to fly aboard a commercial flight, up from less than half the population in the early 1970's. Clearly, air travel has become more accessible, more affordable for the average American. More than 90 percent of all passengers now fly on a discount fare of one type or another and the average discount is more than 60 percent off the full fare, saving passengers billions of dollars a year and providing a way for many more Americans to fly.

That really reflects the history of aviation. What began as a technological wonder, matured into a luxury for a few rich people and finally into an industry which is now a part of the very economic and cultural fabric of this country. American aviation brings together the resources, people and products that have made us the greatest country in the world. Entire industries and segments of the U.S. economy depend on safe, reliable, and efficient air transportation.

It is crucial, then, to meet the challenges now confronting us in aviation. If we do not, we fail far more than ourselves.

Those challenges are considerable, although they can be stated quite simply: provide public air transportation and all of aviation with a system of airports and airways that is safe; meets the public demands placed on it for capacity and efficiency, and is flexible enough to keep pace with a deregulated, competitive, dynamic air transportation industry.

It is a unique requirement for an American industry, because unlike any other enterprise, commercial aviation cannot move so much as an inch without the direct involvement of the federal air traffic control system. You may have heard the analogy of the three-legged stool as air transportation. One leg is, of course, the airline industry. The other two legs—the airports and the airways—must stay in balance with the needs of the flying public. Providing those two elements with the necessary resources to achieve and maintain that balance is what we gather this year to debate.

It is a tall order, but certainly not an impossible one. We not lack for resources. We do not lack for technology. And we do not lack for desire. We need only the resolute commitment to propel American aviation, the envy of the world, into the next decade and into the next century.

INHERENT DEFICIENCIES OF THE CURRENT STRUCTURE

During a period that now covers three decades there has been periodic reexamination of the problems and needs of our national air transportation system, and how thety might best be addressed. The Declaration of Policy in the Airport and Airway Development Act of 1970 includes statements identifying these problems and needs:

"That the Nation's airport and airway system is inadequate to meet the current and projected growth in aviation."

"That substantial expansion and improvement of the airport and airway system is required to meet the demands of interstate commerce, the Postal Service, and the national defense."

When Congress passed reauthorization legislation in 1982, the Declaration of Policy stated:

"The continuation of airport and airway improvement programs and more effective management and utilization of the Nation's airport and airway system are required to meet the current and projected growth of aviation and the requirements of interstate commerce, the Postal Service, and the national defense."

In 1970, 1982, and now in conjunction with reauthorization legislation, we are focusing on the same problems and the debate is revolving around the same concerns. There are intolerable air traffic delays, dissatisfaction about lagging investment in safety and capacity improvements and the inadequacy of the nation's airport and airway system to meet public air travel demands.

In recent years, there has been intense Congressional attention to airport/airway problems as air travel frustrations have mounted because the aviation system is still plagued by the same problems that have existed for years.

I am struck by what I believe is a universal theme on which all of us agree:—The Aviation Trust Fund concept is broken: and we need to fix it.—Moreover, I think we all agree that it is the aviation infrastructure itself which is not meeting the needs of any user group in the private sector. Other user representatives are here, just as ATA is, to tell you those two things.

For the last two years, the ATA member airlines have analyzed the causes of those problems in order to find solutions. Their ability to do business in this country, efficiently, productively, and most importantly to meet public demand safely is, simply put, in jeopardy.

Together, we recognize the problems. Together, we must forge solutions. Five more years of the same old song is unacceptable to all of us.

The deficiencies of the current structure are legion, but they fall essentially into three categories of constraints: funding, personnel, and procurement. One affects the other. Individually, each is difficult, but together, they create an impossible environment in which to sustain the kind and quality of national air transportation system this country wants and needs, today and tomorrow.

1. Funding

This reauthorization process is focusing on the first problem—funding. In a nutshell, system needs are not driving expenditures. Rather expenditures are capping system needs—cutting them off at arbitrary levels which have very little to do with true system capacity. The Aviation Trust Fund was created to solve the enormous air traffic control delays of the late 1960s through user-funded capital improvements and modernization of the airport and airway system. In the early 1980s, the National Airspace System Plan (NAS Plan) was designed to carry that effort forward. We and other user groups agreed to higher user charges to fund that effort. The revenues flowed and continued to flow into the Trust Fund, but appropriations have not been made at the levels authorized and necessary to modernize to meet current or projected future demand for services.

Every slippage of the modernization plan has a consequence we cannot afford if the system is going to meet the demands of the American public. Funding instabilities and limitations threaten system capacity from every aspect of the infrastructure. The equipment of the 60's cannot meet the needs of the 80's, and it certainly cannot meet the needs of the 90's and beyond.

2. Procurement

That brings me to the second fundamental constraint on the system—procurement. The government's procurement system is inappropriate to managing and modernizing the ATC system. Although airports have alternatives to the federal programs for both funding and procurements, the ATC System is entirely funded and procured through federal appropriations. In fact, most airport financial needs are met outside the federal process. They can directly finance and directly procure equipment and facilities for needed development. Even with federal grant money, airports do not routinely have to follow federal procurement regulations. If they did, I submit we would all be even worse off.

To illustrate this part of the picture, Attachment A[1] to my testimony is a copy of a (perhaps ironically named) "flow" chart of an actual FAA procurement procedure. At its *best*, this procedure is planned to take over a year and close to two just to get an award go-ahead, even for projects fully identified, justified, and fully budgeted in the NAS Plan!

The best example available today of the shortcomings of the current procurement process is provided by FAA's Advanced Automation System (AAS)—a key element of the NAS Plan. AAS is a complex program, comprised of many discrete elements, intended to provide improvements in safety and capacity, of particular importance to terminal control functions. Without AAS, FAA will be unable to introduce automation enhancements essential to reduce risk of mid-air collisions similar to the recent tragic accidents near Cerritos, California, and Salt Lake City, Utah. Nor will FAA be able to more expeditiously deliver severe weather warnings of hazards such as wind shear to pilots operating in terminal areas, nor will FAA be able to improve capacity significantly in terminal airspace and improve reliability of equipment essential to the controller's job.

Acquisition of a major system such as AAS must be carried out under the mandates of OMB Circular A-109. The flow chart attached to my statement describes the process for acquisition of major systems within DOT—the so-called "TSARC" process. On January 29, 1987, testimony before the Senate Aviation Subcommittee, Mr. Herbert McClure of the General Accounting Office (GAO) stated that completion of the AAS program has fallen about 8 years behind FAA's original NAS Plan schedule. FAA's current schedule shows less slippage—about 3 years. But the important point is that automation improvements needed now will not be introduced in the ATC system before early 1993!

Ironically, GAO criticism of FAA's acquisition strategy for AAS has contributed significantly to the delay in AAS procurement—perhaps as much as 2 years. While it is also true that part of the delay can be charged to FAA changes in technical specifications for some elements of the AAS system, the major portion is due to the complexities of the procurement process and inability to fund the program adequately and consistently. The funding deficiencies are functions of our current budgeting and appropriations process and the complex relationships between the Executive and Legislative Branches.

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[1] The attachments were not reproducible.

Numerous other examples of procurement process and FAA program management deficiencies can be cited. For example, failure to procure in a timely manner needed Airport Surface Detection Equipment, and transmissometers to measure visibility at airport runways. But the AAS program provides a classic example of the byzantine complexities of the current budgeting, appropriation, and procurement process and the inability of that process to respond to the needs of the airspace users and, more importantly, the traveling public. Change is required!

3. Personnel

Let us consider the third fundamental category of constraints: The personnel and management structure. I could not begin to describe this area without reaffirming our industry's deepest support and respect for the dedicated professionals of the FAA. They do an exceedingly difficult job well, under circumstances of extreme adversity. Since the illegal PATCO strike in 1981, the FAA has struggled to recover from the loss of three-quarters of the air traffic controller workforce. Unfortunately, we cannot declare that full recovery is here.

The failure to rebuild the controller workforce, together with slippages in the modernization program, and therefore lack of scheduled productivity gains from automation, have exacerbated the system's limitations. Once gaing, system needs do not drive staffing and management. Staffing and management decisions are forced by the government structure to meet budgetary—not work—demands.

It is unlikely that we would have reached even current levels if the Congress had not required it. Even if funds were readily available, grade and position ceilings established by OPM, OMB, and DOT prevent matching people to system needs. Some critical centers remain understaffed in the full performance level controller category in part because the federal civil service regulations cannot provide the needed incentives to encourage people to go to an otherwise unattractive work locale, whether it be to a more severe climate, a higher cost of living, moving expenses, or controlling more traffic per hour. A solution to the problem requires personnel and management flexibility in compensation, hiring, benefits, and other terms and conditions of employment.

Management issues, of course, go beyond the number and whereabouts of controllers. The FAA is subjected to a layering of oversight, micro-management, partisan political influences, and frequent changes of political leadership which create conflicts of judgment on policy direction, leadership, planning, and staffing.

I have spent some time on these problems because I think that when we examine them, the need for a fundamental restructuring of the FAA becomes compelling.

Deregulation gave this industry the freedom to determine its routes and rates in response to public demand—not government dictate. The free enterprise system works. Supply and demand are the factors that make it work, and they cannot be in sync under the present structure.

Correcting the funding deficiencies are absolutely essential, but it will not resolve the problems of a national air transportation system for now or the future. The traditional processes of the federal government are slow and cumbersome; regulations which inhibit prompt action are myriad; and the pressures of budget deficits preclude adequate funding. Air carriers have the capability and authority to respond swiftly to changing and growing demand by adjusting and adding flights, maintenance bases, and people as requirements and business judgment indicate. But the supporting establishment, the air traffic control system, under government restrictions, cannot match the need generated by public demand for greater and more efficient air travel. The impact of escalating demand for more support services on a structure which cannot efficiently satisfy current demand is serious and worsening.

Passenger delays exceeded 2,000 hours per day last year—that's equivalent to grounding an airline of 200 aircraft everyday.

Delays cost the consumer and the carriers more than $3 billion last year.

The Aviation Trust Fund has lost the trust of the aviation community and the Congress.

The NAS Plan will be behind schedule, according to GAO estimates, in some critical programs by up to seven years at completion.

ATA PROPOSED SOLUTION

Traditional federal government procedures designed to cycle through an annual process aimed at assuring adherence to fiscal and regulatory requirements cannot provide a quick, quality response to changing need. Until the support structure can be responsive to public demand and until strategic plans for the system can be developed with assurance that funding and procedures will permit implementation on schedule, the problems will remain, and the travelling public, as well as the airline industry, will continue to suffer the consequences.

The cause of the problem can be corrected—and in a way to preserve the role of the federal government in vital governmental functions while permitting operation of the system in a business-like manner. A corporation wholly-owned by the federal government can be established with the attributes and authorities of a commercial enterprise. There is ample precedent for such a step. When the federal government is engaged in a commercial-type venture dealing with the private sector and the public, it should and frequently has created a government corporation to more adequately achieve its objectives. Government corporations have included the Federal Deposit Insurance Corporation, Tennessee Valley Authority, Overseas Private Investment Corporation, Pennsylvania Avenue Development Commission, Pension Benefit Guaranty Corporation, St. Lawrence Seaway Development Corporation, Synfuels, and Federal Savings and Loan Insurance Corporation. All of these were established by federal statute, and each statute is different from the other because the functions are different. But all government corporations have greater than traditional freedom of action based on justified need.

The flexibility of a federal corporation approach will permit correction of the generally recognized problems that plague this system.

Three primary and very far-reaching changes are essential. First, the revenue stream must be redirected from a tax receipt flow with subsequent lengthy appropriation action, to a user fee stream flowing directly, without restriction, to the air traffic control agency with authority to adjust the rates as required to meet justified need.

Second, the air traffic control agency must be freed from civil service laws and regulations governing hiring, compensation, benefits, and other terms and conditions of employment.

Third, the agency must have the authority to contract for equipment and facilities in accordance with accepted commercial practice and to adopt, amend, and repeal such rules and regulations as necessary to accomplish this purpose.

Until and unless these basic changes are made, the problems will continue and worsen. The only feasible approach to accomplishing the required changes is through the creation of a government corporation. Improvements within the family of traditional government agencies, whose management attributes are designed for the operation of internal government programs with only incidental dealings with the public and the private sector, cannot provide lasting relief.

Management attributes designed to meet the constantly changing needs of an agency dealing primarily with the public and the private sector can best attain long term stability for that agency. Such attributes are within the specifications for a wholly-owned government corporation.

I have included as Attachment B to my testimony our industry's recommendations as to scope and structure of such a corporation. Essentially, we believe it should at a minimum incorporate the management and funding of the ATC system. While later review would be appropriate, the proposal would not include most of the safety and regulatory responsibilities of the FAA, but would assume and preserve all of the FAA's existing ATC relationships with the Department of Defense and NTSB.

The flexibility and the independence possible in a federal corporation can benefit all the users of the system. Properly structured to ensure adequate Congressional oversight, without annual appropriations or civil service and procurement structures common to traditional but here inappropriate government operations, and with a statute that establishes operations not dictated or controlled by any one user group, a federal corporation can truly offer all of us who care about and need this system hope for the future, where none can now exists.

ALTERNATIVE APPROACHES

As has been the case each time reauthorization legislation is necessary, Congress will look at a host of options and solutions. Some promise important system improvements, while others are short-term remedies to special problems, and still other initiatives surface as refinements to current law. We would like to offer comments about various others ideas that will be condidered this time around.

One obvious option is to leave things generally the way they are today. Merely applying a variety of bandaids to the most obvious immediate flaws in the system will not provide any long term cures. Past history should quickly convince us it is time for real change. There is unanimous agreement that system inadequacies and inefficiencies must not be allowed to continue. The 100th Congress provides a historic opportunity to structure our national air transportation system to accommodate the needs of the economy, continue a commitment to safety as the highest priority and meet growing public air travel demands.

TRUST FUND OFF BUDGET

Several mechanisms have been proposed to assure that the Airport and Airway Trust Fund will function properly. For the past several years, we have joined various efforts to remove the Trust Fund from the Unified Budget. Such an approach would remove the Trust Fund from the Congressional and Presidential Budgets and exempt the Trust Fund from Gramm-Rudman-Hollings budget cuts. If enacted, the legislation would seem to remove many of the budgetary impediments related to the Trust Fund and expenditures for aviation programs. However, most Trust Fund programs would still require annual appropriations, and removing the Fund from the Budget will not change this requirement.

That is the principal reason we believe taking the Trust Fund off budget may be a step in the right direction, but not the permanent solution. One of the goals we have all sought in the past is assured funding at fully authorized levels for the capital development programs. Having the Trust Fund off budget would clearly remove some constrainst, but it would not mandate full appropriations. And as noted earlier, dollars are only part of the problem. In seeking permanent, long term solutions to long standing problems, there is a compelling need to overhaul the cumbersome management, structural and procedural impediments that have evolved at the Federal Aviation Administration.

TRIGGER TAX

A prudent and responsible trigger tax is another mechanism that we can support as a positive step—but not a permanent solution. We actively participated in an effort that was made in 1982, in conjunction with reauthorization, to convince the House tax writing committee to permit a trigger tax approach as adopted by the Senate. As you know, we were unsuccessful. Since that time, spending requests for the capital programs have fallen short of authorizations by about $1.3 billion and appropriations have fallen short of budget requests by $850 million. Taken together, the shortfall is more than $2 billion. In the meantime, the Trust Fund surplus has grown from $2.5 billion to about $5 billion.

The trigger tax concept could, if properly designed, be beneficial to correct what has become a historic overpayment of taxes by users. Unfortunately, a tax trigger cannot assure vitally needed spending nor can it solve existing FAA management inefficiencies, personnel/compensation related problems and correct other inadequacies. Even though aviation users would welcome a tax reduction, the primary goal is to allocate sufficient resources to complete massive safety and capacity improvements necessary to accomodate system growth.

INDEPENDENT AGENCY

Reestablishing the FAA as an independent agency is another idea that has resurfaced. There seems to be little enthusiasm for this approach. Even if Congress did give the FAA independent agency status, it is a solution that holds no real promise. The agency would still be subject to the budgetary quagmire and the annual appropriations process, as well as the same suffocating personnel and procurement regulations.

PRIVATIZATION

As you know, there are those who are proposing complete privatization of ATC functions as the right solution for the future. This approach simply is not achievable. There is strong, vocal Congressional and other opposition to the idea. We do not advocate privatization even though there is a mistaken perception that such an approach is what is contemplated in the framework of the federal corporation idea we propose.

Undoubtedly, as the reauthorization deliberations continue, other alternatives will be advanced. We welcome the examination of these alternatives. The airport/airway system is crippled by air traffic delays, there is a huge backlog of unfunded aviation safety and capacity projects, and the $12 billion National Airspace System (NAS) Plan for modernizing the system has been shortchanged by more than $2 billion. In short, the Trust Fund has been rendered virtually useless by the budget process and as a result the unobligated surplus will grow to an unconscionable $5.6 billion during 1987.

NEED FOR A TRANSITIONAL REAUTHORIZATION

The fundamental changes we are proposing to the structure of air traffic control management and development will require time to ensure an orderly transition from the old regime to the new. Even if legislation were enacted this year, a detailed plan of transition would be required addressing how best to capitalize on the opportunities the reorganization presents and to maximize the prospects for the new authority's smooth transition.

Further, the prospect of any interruption in the funding of federal programs for airports and airways is unacceptable. The infrastructure needs of the system must be met both in the short and long term, and although a federal corporation approach for airspace funding and development offers hope for meeting system needs over the longer term, immediate and pressing needs must be met now.

ATA recommends that the reauthorization of FAA's airport and airways programs be for a period of two years. During that time, the elements of legislative and regulatory changes necessary to accomplish ATC restructuring should be mapped out. Meanwhile, the critical business of keeping up with present-day requirements of the airport and airway system can continue through adequate funding levels and program enhancements.

It is important to note that we have historically supported a longer term reauthorization. The frustrating experience of the past five years clearly demonstrates the difficulty of fashioning mid-course corrections, no matter how unsatisfactory the situation becomes. If we do not find permanent, workable solutions now, the national air transportation system cannot tolerate another five years of the status quo. To that end, we wish to present our views on airport and airway program priorities and objectives for a transitional two-year reauthorization.

AIRWAYS IMPROVEMENT

ATA and its member airlines continue to support the principal NAS Plan objective to improve the safety and efficiency of the nation's air transportation system. Unfortunately, FAA has been unable to pursue the modernization program aggressively enough and has been forced into a conservative approach to accommodate funding constraints and constant NAS Plan oversight studies and recommendations. For example, the "Host" computer replacement program is at least one and a half years behind the original schedule contained in the original 1981 NAS Plan, and as previously noted, the Advanced Automation System (AAS) is at least three years behind schedule.

These two programs are essential if FAA is to implement critical safety enhancements in the National Airspace System (NAS). The safety enhancements I refer to are needed to reduce risk of mid-air collisions and avoidance of severe weather phenomena such as as wind shear.

But FAA and the user community cannot reap the full benefit of these initiatives unless the improved Air Traffic Control (ATC) data processing and display system (Host and accompanying Advanced Automation System) are in place. The Host computer systems are currently scheduled to be operational at all 20 air route traffic control centers by the Spring of 1988. But the first scheduled implementation of the Advanced Automation system which provides controllers with new display consolers will not occur before 1993.

There are, of course, a myriad of other important projects and equipment embraced by the NAS Plan. For example, FAA is in the process of improving their long range surveillance radar systems, next generation weather radars and terminal Doppler weather radar systems to detect severe weather phenomena at airports such as wind shear and microbursts.

Since FAA was unable to obtain fully authorized F&E funding in FY '87 for these NAS Plan Projects, the Agency must receive additional funds in this and subsequent years to assure these system improvements are not further deferred.

Overall, ATA believes that both the hardware and research areas of FAA's 1988 airspace improvement programs are understated. Last year FAA forecast their FY 1988 fuding requirement as $215 million for Research, Engineering and Development (R,E&D) and $1.615 billion for Facilities and Equipment (F&E). The Administration's budget request for FAA in FY 1988 is $150 million for R,E&D and $1.350 billion in F&E.

The FAA program funding levels reflected in the Administration's proposed reauthorization legislation for FY 1988 and FY 1989 on F&E and R,E&D are inconsistent with previously stated funding requirements. In order for FAA to adhere to the schedule established in the 1986 NAS Plan, the FY 1988 and FY 1989 F&E funding levels should be $1.615 billion for each year. The R,E&D funding levels for FY 1988 and 1989 should be approximately $225 million annually.

The NAS Plan has lost much of its momentum and has fallen behind schedule as was predicted if FAA didn't get the authorized funds to carry out the program. It is becoming more and more difficult to realize contemplated NAS Plan benefits when FAA is unsuccessful in obtaining the funds to complete the program. There appears to be more concern about cost/benefit analysis, reducing production risks, and improving workforce productivity than about widespread obsolescence of existing equipment, improved safety features, and increased system capacity to meet the burgeoning demand of air traffic.

It is essential to find ways to expedite the NAS Plan schedule, in particular the Advanced Automation System, rather than accepting project slowdowns. To do less is a disservice to the traveling public who have already paid for the improved efficiency, capacity, and safety that would be gained.

AIRPORT DEVELOPMENT

A major element of aviation system capacity is the availability of adequate and efficient airport facilities. In combination with the debt financing supported by airline and other corporate users of airports, user-supported federal assistance to airports provides the basis for airport improvement. In particular, the federal role in airport development provides the opportunity for close coordination between the federal interest in the national airport and airway system and the responsibilities of local airport operators.

This important federal interest in airport development argues for the reauthorization of the federal grant program. Since user tax funds are collected from passengers and shippers utilizing all airports in the system, ATA believes that all airports should receive funding from the program. However, the reauthorization process provides an opportunity to focus additional resources for the development of capacity at major airports that have the greatest impact on the national air transportation system.

The volume of airport grant requests being submitted at present, even though the program is about to expire, demonstrates that airport development planning need not be impeded by a short-term reauthorization. For this reason, and those previously stated, ATA recomends that the airport improvement program be reauthorized for a 2-year period for all airports which are currently eligible.

We strenuously oppose the proposition of defunding (sometimes erroneously referred to as defederalization) of any airport, particularly when such a proposal is linked to the removal of the statutory prohibition on head taxes. Specifically, ATA's objection to defunding and head taxes are based on the following considerations.

1. Defunding would impair coordination between the FAA and those airports not participating in the federal grant program regarding the efforts to meet the needs of the nation's aviation system. Separation of any of the major airports from the federally sponsored planning and development program would be detrimental to airport and airway system development.

2. Passengers and shippers have already paid federal user taxes to fund needed airport development, and a surplus of about $5 billion exists in the Aviation Trust Fund. Those funds should be made available for airport development, not arbitrarily withheld or ignored. Further, no additional charges on users are warranted given the enormous Trust Fund resources already collected in advance.

3. Passengers using defunded airports would continue to pay the federal ticket tax, and thus be subject to double taxation if a head tax were authorized. Worse yet, the Administration is proposing that entitlement funds turned down by defunded airports should return to the Trust Fund, and not be available for system improvements. And airports interests are proposing that a head tax be authorized even if an airport receives a federal grant. ATA believes that airports have a variety of funding alternatives from federal, local, and user sources, and do not need a new federally-authorized funding source which raises so many questions and concerns.

4. Collection of head taxes by airlines, on behalf of airports, would be extremely burdensome to the complex system of interline ticketing and revenue accounting arrangements among airlines and travel agents worldwide. The difficulties inherent in collecting a head tax for passengers using a particular airport from the over 29,000 U.S. travel agency locations handling hundreds of millions of documents issued by over 167 airlines cannot be underestimated.

ATA believes that the reauthorization of the airport program should focus on enhancements which will promote the goal of the aviation system rather than on novel proposals which fragment the airport development environment.

AIP FUNDING LEVELS

ATA proposes an AIP funding level of $1.5 billion per year for the 2-year reauthorization period. Program funding should be restructured to make more resources available for projects which will enhance system capacity and mitigate noise. Moreover, we think the established setasides should be continued and funded at levels generally consistent with current law. In addition, a new entitlement for cargo hub airports is proposed.

ATA proposes the following allocation of annual program funds:

[Dollar amounts in millions]

	Amount	Percent
Primary airport entitlement	$500	33
Cargo hub entitlement	40	2.6
Discretionary for capacity	500	33
Noise programs	165	11
Reliever airports	100	6.6
State/general aviation airports	120	8
Commercial service airports	55	3.6
Alaska	20	1.3

PRIMARY AIRPORT ENTITLEMENT

ATA advocates the maintenance of the existing passenger enplanement formula as the basis for allocating primary airport entitlements at the funding level experienced in FY 1987. This allocation methodology is well established and accepted, and has become an important entitlement to airports of all sizes. We see no reason to amend it. However, we do propose that the maximum allocation be raised from the current $12.5 million limit to a new limit of $16 million. Likewise, the minimum allocation for primary airports should be raised from the current $200,000 to a new minimum of $300,000.

CARGO HUB ENTITLEMENT

Since the 1982 reauthorization of the airport and airway program, the air-cargo and express industry has experienced phenomenal growth in character and in scope. Many airports have become hubs for cargo sorting activity, and activity by all-cargo aircraft now has a major impact on the airfields of a growing number of airports. Further, the contribution of shippers to the Trust Fund through payment of the air waybill tax has also grown.

ATA strongly urges that a separate Cargo Hub Entitlement category of $40 million be established. Funds made available from this category should be directed primarily to airports with a relatively high volume of all-cargo operations. The Cargo Hub Entitlement would supplement the entitlement that airports receive from the passenger enplanement formula, and not be subject to the maximum entitlement restriction.

ATA proposes that Cargo Hub Entitlement funds be allocated to airports which experience all-cargo aircraft landed weight in excess of 500 million pounds annually. These eligible airports would share the available funds on a pro-rata basis based on each eligible airport's percentage of the total all-cargo landed weight of all eligible airports. This approach would ensure that the limited available funds would be directed to those airports where all-cargo activity is a significant factor in the use and development of the airport. ATA estimates that 25 to 30 airports would be eligible for cargo hub entitlement funds, consisting primarily of major origin/destination cargo centers (i.e. Los Angeles, Miami and Atlanta) and cargo/express sorting hubs (i.e. Louisville, Memphis and Dayton).

DISCRETIONARY FOR CAPACITY

The development of airport capacity at the nation's hub airports is a critical component of the effort to meet the needs of the air traveling public. Currently, inadequate airport capacity contributes to the problems of delay, inefficiency and other aviation system constraints. Combined with air traffic control and airspace improvements, airport development can provide the basis for meeting immediate needs of the traveling public and the future growth of the air transportation system.

As stated earlier, ATA believes that the reauthorized airport program must direct greater resources to airport projects which will enhance the capacity of the aviation system. We are encouraged that both the Administration and the airport community are also focusing on this priority in their proposals. FAA should have much greater resources at its discretion for capacity enhancement grants than has been the case in the past. We believe that a discretionary fund of $500 million should be made available annually for this purpose.

During the past 18 months, ATA has closely examined what airport development and aviation navigational aids at airports would, if provided, significantly enhance the operation capacity of the airport and airway system in the short term. This examination focused on the 22 pacing airports, which account for 95% of the total delays incurred by air carriers, and subsequently on an additional 17 hub airports. These airports were selected based on current and forecast traffic trends indicating their pivotal role in the national system.

The summary of costs associated with the improvements recommended by ATA for the 22 pacing and 17 hub airports are contained in Attachment C. The ATA studies identify high priority development needs totalling about $1.2 billion, consisting of $1,044.3 million for airport development and $151.8 million for navigational aids. The high priority and quick payback of these projects and facilities calls for their completion and installation as soon as possible.

The current AIP is not structured to effectively provide resources for major development projects or noise programs which can result in significant system capacity expansion. In FY 1987, for example, $1 billion has been made available for the AIP. However, due to the structure of the program, a maximum of only 140 million will be available for discretionary grants nationwide outside the program set-aside categories. With the new runways, for example, costing $80–100 million more resources must be provided specifically for capacity enhancing discretionary grants as soon as possible.

Grants from the capacity discretionary fund should be made only for projects or programs which will result in significant net capacity enhancement. The proper application of these monies can result in significant expansion of system capacity. However, it is imperative that airports that receive grants for the purpose of capacity enhancements assure the Federal Government that the total capacity resulting from the project will be made available for use and will not be arbitrarily restricted.

NOISE PROGRAM

Along with efforts to enhance airport capacity, additional efforts must also be made to mitigate noise impact around airports. A broad, all-encompassing solution to the airport noise problem is beyond the scope of the grant program alone.

We are participating in efforts which are now underway to find constructive approaches to the many interrelated factors affecting aviation noise. These efforts, under the auspices of the Industry Task Force on Airport Capacity Improvement and Delay Reduction, are focussing on a broad range of issues which, if successfully addressed, may offer promise for the future.

Additional resources must be made available for noise programs at airports. We propose that $165 million annually be made available specifically for noise mitigation programs, more than doubling that which was available in Fiscal Year 1987. These funds would be in addition to funds available for noise abatement projects from the $500 million entitlement fund and, in cases where a capacity enhancement would result, the $500 million capacity discretionary fund.

RELIEVER AIRPORTS

An essential ingredient to the enhancement of hub airport capacity is the establishment and upgrading of existing reliever airports. Current law recognizes the need to put major resources into reliever airports, and $100 million has been provided in FY 1987. The national contribution which reliever airports make is clear. Funding of $100 million annually should be made available again in Fiscal Years 1988 and 1989.

STATE/GENERAL AVIATION AIRPORTS

ATA recommends that the existing level and structure of Federal funding for state programs for general aviation airport development be maintained. We do not believe that restructuring or expansion of the state role in federally-funded programs would enhance those programs. It is also our belief that, since not all states are equipped to assume expanded program management responsibilities, restructuring would simply result in an additional governmental layer in the grant process with duplicative functions and overhead required at both the state and Federal levels.

COMMERCIAL SERVICE AIRPORTS

The important role and the continuing needs of commercial service airports call for maintaining an annual set-aside funding level of $55 million for the next two years, the same level as provided in Fiscal Year 1987. The Commercial Service Airport program should be administered directly by FAA.

ALASKA

For the past five years, Alaska has received a fixed annual amount of $12.5 million, notwithstanding the overall growth of the AIP during that time. ATA believes it is appropriate to increase the Alaska apportionment to $20 million annually to help meet the airport needs of that state, which is so dependent upon aviation for transport throughout the state.

REVISIONS TO SPONSOR ASSURANCES

The assurances which the FAA require of airport sponsors as a condition of airport development grants are an important means of protecting federal interests. Many of these assurances are also of great consequence to airports users who have no practical alternative but to conduct their businesses at these public facilities. ATA urges the continuation of existing sponsor assurances, with three specific modifications designed to improve their equity and usefulness.

1. Consultation with users

Under existing law, airports are required to certify to the FAA that they have consulted with affected users. However, the nature of such consultation is not specified in the sponsor assurance. The result has been varying quality of consultation between airports and users on project grant applications. The FAA has issued guidance to its regional offices regarding what constitutes reasonable consultation. ATA believes more specific requirements along the lines of the current FAA guidance be made an integral part of airport sponsor assurances, through statutory language as follows:

"Reasonable consultation shall mean consultation which is initiated by the sponsor with prior written notice to each user, takes place prior to submittal of projects application to FAA, encompasses all project considerations that bear on the decision to proceed and which impact users' charges or operations, affords users a reasonable opportunity to provide input prior to final decisions being made on proposed development, and involves a representative designated by each user to speak for it in such matters."

2. Airport revenue

Current statutory language has been helpful in limiting circumstances in which airport revenue can be inappropriately diverted from the airport. However, a significant potential loophole currently exists for "other local facilities which are owned or operated by the owner of operator of the airport and directly related to the actual transportation of passengers or property." This would appear to include such facilities as trains, buses, and boats as well as their terminals and operating areas. The addition of the phrase "by air" at the end of above-quoted language would ensure that airport revenue serves the needs of the airport and the passengers and shippers using air transportation.

3. Economic nondiscrimination

In current law, an airport must assure FAA that it will comply with various economic non-discrimination requirements. One of these requirements specifies that there shall not be economic discrimination by the airport against air carriers that make similar use of the airport. However, exceptions are specified for "reasonable classifications" such as "combined passenger and cargo flights or all cargo flights", and "tenants or non-tenants."

ATA understands and supports the laudable intention of this prohibition on economic discrimination. However, the "reasonable classifications" of use contained in the statute discriminate among user groups on matters which are irrelevant to airport use. ATA recommends that the economic nondiscrimination provision applicable to airport/air carrier relationships in current law be amended so that a "similar use/similar obligation" basis for nondiscrimination is required. We recommend the following statutory language:

"Each air carrier using such airport (whether as a tenant, non-tenant or subtenant of another air carrier tenant) shall be subject to such nondiscriminatory and substantially comparable rules, regulations, conditions, rates, fees, rentals, and other charges as are applicable to all such air carriers which make regular use of such airport and which utilize similar facilities subject to reasonable classifications such as tenants or non-tenants, and signatory carriers or non-signatory carriers. Classification or status as tenant or signatory shall not be unreasonable withheld by any airport, provided an air carrier assumes financial obligations susbtantially similar to those already imposed on air carriers in such classification or status."

OPERATIONS AND MAINTENANCE

The Administration proposes to divert a huge portion of Trust Fund revenues to FAA Operations and Maintenance (O&M) costs. This issue is continually debated and there is consistent opposition to major increases in the Trust Fund contribution from O&M while a backlog of capital projects and safety/capacity programs remain unfunded. The Administration also proposes elimination of the so-called penalty provision that provides for a reduction in O&M expenditures from the Trust Fund when F&E and AIP are not fully funded.

We support a continuation of the penalty concept. We all hoped this innovative approach would provide sufficient incentive to stimulate funding requests consistent with authorized spending levels. The penalty provision has been the source of considerable frustration for the Administration. Thas was not what was intended. The desired result—full funding—has clearly not been achieved as evidenced by the $2 billion spending shortfalls since 1982. Perhaps an even more stringent penalty provision should be considered since current law has not achieved the desired result.

CONCLUSION

A simple reauthorization—maintaining the status quo—will not serve the needs of the national air transportation system. The airlines urge progressive, responsive congressional action to implement a better system.

We have given you our thoughts on the specific issues before us in these hearings and I would like to assure the Committee that ATA stands ready to help in this crucial efffort. This completes my statement. We will be happy to respond to respond to your questions.

Senator FORD. Thank you very much, General.

Mr. Cloud.

Mr. CLOUD. Yes, Mr. Chairman. We appreciate greatly the opportunity to appear here today and present the testimony concerning the air cargo industry, specifically the testimony concerning Federal Express.

As you are aware, Federal Express and the express industry is a direct product of the deregulation of air cargo some years ago, and a very successful industry arose from that deregulation effort. Federal Express currently employs 45,000 people. The industry employs 100,000 people approximately. The revenues in this industry today approach $10 billion annually.

We have certainly some concerns about what is currently happening in the aviation system itself. I would like to say, in addition to the impact on employment generally, Federal Express has and the industry has impacted certainly constituents in many of the areas represented on this committee.

Federal Express has tried to purchase all of the Cessna 208's that can be built in Kansas. We have attempted to purchase and have purchased McDonnell-Douglas DC–10's, keeping their line open for the development of what is a new aircraft on the market today, the MD–11. And there is an unconfirmed rumor that one of the new entrants in the express business has located a hub somewhere in the State of Kentucky.

Senator FORD. That is a part of your statement that is absolutely correct.

Mr. CLOUD. I would like to take one minute to address an issue. I could hardly miss the discussion previously you had about the Japanese. There is an issue concerning the express business in Japan which I think warrants a very short comment.

United Parcel Service as well as Federal Express are in the process of implementing services to and from Japan. In order to clear customs in Japan for a small item, high tech item, whatever, the cost of that procedure in Japan approaches $30. In the return of the same item manufactured in Japan, to clear customs in the United States the cost to Federal Express and I suspect to United Parcel Service is something on the order of $2.50.

Obviously, this is a non-tariff barrier which is extremely important, the elimination of which is extremely important to Federal Express and I would suppose to UPS as well.

Not only are the Japanese problems in the express business. We certainly have concerns about the regulatory situation as it exists today in the United States. Though the air express business was deregulated, we now see a wave of re-regulation, not by the Federal government but by local airports, by local entities, that truly threaten the viability of our industry.

We are extremely concerned about the potential that the system itself will not support hub operations, which were originally designed by Frederick Smith to economize for the delivery of express shipments, that system now adopted by most of the passenger carriers as the most efficient way to transport passengers as well as cargo.

We do believe that proper utilization of the moneys available through the Aviation Trust Fund is an absolute necessity in resolving what I see as a national and not a local problem, a national problem in our system of aviation. We would suggest that this committee take what I think would be a very enlightened step and address this issue as a national issue.

Noise is a tremendous concern, I am sure, of all express carriers and certainly to the aviation industry in general terms.

I would also like to end this by issuing an invitation to this committee to visit Federal Express, to see firsthand what has happened through deregulation of the air cargo business, to see for yourselves the impact on customers, now numbering at Federal Express approximately 1,400,000 business customers in the U.S. today.

I will be pleased to answer any questions you may have.

[The statement follows:]

STATEMENT OF A. DOYLE CLOUD, JR., VICE PRESIDENT OF GOVERNMENT AND REGULATORY AFFAIRS, FEDERAL EXPRESS CORPORATION

Mr. Chairman and Members of the Subcommittee, I appreciate the opportunity to appear and testify before you in these hearings on the important topic of the reauthorization of the Airport and Airway Improvement Trust Fund. Federal Express shares the industry view that the reauthorization of the programs financed by the Airport and Airway Trust Fund is one of the most important legislative proposals facing Congress. The reauthorization program must address much needed improvements to our aviation infrastructure.

I will focus my comments on the particular interests of the air cargo express industry as they relate to specific recommendations which will better adapt the Airport Improvement Program and the use of the Trust Fund to the needs of the public and aviation community.

Preliminary to my specific comments relating to issues of importance to air cargo, I wish to underscore Federal Express' support of the industry position that the Aviation Trust Fund should be removed from the unified budget. The removal of the Trust Fund from the budget process would insure the direct and immediate application of user fees to authorized and greatly needed aviation programs in the areas of airport and airways capacity improvements and aircraft noise. The Aviation Trust Fund was created to solve the air traffic control delays of the 1960's through user-funded capital improvements and modernization of the airport and airway system. The revenues have continued to flow into the Trust Fund, but appropriations have not been made at levels authorized and necessary to modernize our airports and airway system to meet the current or projected future demand for services. It is time to correct the problem.

First, on the issue of specific recommendations regarding the Airport Improvement Program (AIP) and the use of the Trust Fund, Federal Express supports new and specific funding for air cargo related projects. Air Express has grown geometrically over the past ten years. The increased competitiveness and industry growth in air cargo express has increased the traffic handled at our nation's airports. The lack of specific entitlement funding for air cargo facilities has created a lack of attention by some airport proprietors to air cargo needs. The contributions made to the Trust Fund by air cargo carriers have not resulted in improvements at airports which directly benefit cargo carriers. The current AIP entitlement formula apportions funds solely on the basis of passenger enplanements and ignores all-cargo flights. The specific recommendations of the ATA, AOCI and AAAE all seek to correct this oversight in the current legislation.

Providing specific entitlement funding to airports served by air cargo carriers is critical to our industry. The cargo waybill tax paid by all-cargo carriers should be appropriated to provide greatly needed air cargo facilities or to improve those that currently exist.

To place the issue in perspective Federal Express has contributed to the Trust Fund the following taxes on its cargo waybills:

1983	$19,000,000
1984	33,000,000
1985	35,000,000
1986	39,000,000
1987	45,000,000
Total	171,000,000

Federal Express currently serves 90 domestic airports, all participants in the AIP Program. Our primary hub operation is at Memphis International Airport with regional hub facilities at Newark, New Jersey, and Oakland, California. The precise methodology of appropriating cargo funds to individual airports, (whether the allocation is as proposed by ATA or AOCI and AAAE) while important, is not as critical to Federal Express as is the need to immediately address the issue. The institution of all-cargo entitlement funds through the AIP will assist in insuring that the growing contribution made by air cargo carriers to our nation's economy will continue.

Secondly, Federal Express suggests increased funding in the areas of airport capacity enhancement and noise mitigation measures. The lack of airport capacity is a major problem severely impacting the growth of our aviation system. The capacity problem can be attributed, in part, to the ever expanding numbers of airports where adverse public reaction to aircraft noise has spurred airport access restrictions. Aircraft noise issues have contributed to what can be characterized as an insurmountable obstacle to the creation of new airport facilities or airport expansion.

Clearly any immediate solution is impacted by the lack of funding necessary to implement noise reduction and capacity improvement measures. Only financing mechanisms such as a revolving fund created from Trust Fund assets to provide loans to airport proprietors to purchase land surrounding current airports, land banking for future airports, and funds made available for acquisition of homes and avigation easements, or the provision of sound proofing will provide immediate relief. Federal Express vigorously supports current proposals to provide immediate funding through the Trust Fund for the noise attenuation measures previously listed.

Our industry, with the help of Congress and State and local governments, must seek to establish compatible environmental areas surrounding our nation's airports to insure the maximum usage of our airports to meet the growing transportation demands of the public. Our current user fee contributions to the Trust Fund and a significant portion of the Trust Fund surplus should be appropriated for programs designed to enhance the use of our existing airport facilities, each of which is becoming a more valuable asset due to increased use with no additional facilities available. The aircraft noise issue, inclusive of airport access restrictions, is of crucial significance to the management and quality of Federal Express' overnight air express service. No other issue has a greater impact on our multi-million dollar aircraft acquisition and fleet planning decisions. No other issue has a greater potential impact on our aircraft scheduling and system efficiency. And, in the final analysis, no other issue has a greater bearing on the quality of service we are able to render to the hundreds of thousands of shippers and consignees who rely on our overnight delivery services every evening. We respectfully urge this Committee to recognize the immediacy of this problem and to authorize Trust Fund assets to help resolve these problems.

Federal Express also endorses the allocation of Trust Fund dollars to encourage research, engineering, development, production and testing of new airframe and aircraft engine technologies to reduce aircraft noise emission levels. We believe that continuing to search for a technological solution to the noise problem is an appropriate role for the Federal Government. Monies spent in this manner will unquestionably inure to the benefit of not only the aviation community—airports, airlines and users of these services, but to the benefit of the public at large, particularly those located in or near noise impacted areas.

In conclusion, I want to underscore the concern of the entire industry that the Trust Fund which was put in place to promote the integrity and efficiency of the interstate air transportation network has not been utilized as intended. Federal Express urges this Committee to enact legislation that will immediately redirect taxes collected from system users to the purposes originally intended.

On behalf of Federal Express I appreciate the opportunity to submit this testimony. I will be pleased to answer any questions you may have.

Senator FORD. Thank you.

Mr. Leonard.

Mr. LEONARD. Mr. Chairman, members of the Senate Subcommittee on Aviation:

I am Ralph Leonard, a contractor from Stillwater, Maine, a retired military pilot and a general aviation pilot for over 30 years. I am here today in my capacity as Chairman of the Airport Development Committee of the Associated General Contractors.

I am accompanied by the Highway Division Associate Director, Valentin Riva.

The situation facing our nation's airport and airway system is becoming critical. According to the FAA, more than 696 million passengers are expected to fly by fiscal year 1998. This represents an astounding 70 percent increase from the 409 million passengers which the FAA estimates flew on commercial airlines in 1986.

During the same time period, the country's civil aircraft fleet is expected to grow to more than 250,000, as aircraft carriers increase their fleets to meet the anticipated demand for air travel, and as another 30,000 general aviation aircraft will come into operation.

The availability of safe and efficient air transportation depends largely on the continued investment in airport capital development. This will require lengthening and strengthening runways and building of new terminals, gate space, hangars, and service facilities.

The FAA now estimates at least $24 billion in capital development will be required by 1995 to meet the increases in demand for air travel. FAA's assessment is backed by the American Transportation Advisory Council in its ATAC-III report. According to this report, "at least $27 billion will be needed to fund the required capital improvements in the nation's airports over the 1987–1995 period."

The administration's legislative proposal, the "Airport and Airway Enhancement Act of 1987," calls for a two-year reauthorization of the airport improvement program at the current funding level of $1.017 billion. This is significantly less than the approximately $2 billion in annual funding estimated by the Airport Operators Council International to be required for airport capital development.

AGC recommends that Congress reauthorize the AIP program for a five year program, as it has in the past, as opposed to the two year program authorization recommended by the administration. This would provide much-needed continuity for what is certain to be a critical period for the airport improvement program.

The administration's proposal may well increase the "effectiveness" of the limited contract authority made available under its funding provisions by providing greater flexibility to the existing apportionment and discretionary fund distribution formulas.

However, AGC believes the proposal misses the mark. What is required is not so much a realignment of formulas and the enactment of new definitions, but substantial increases in funding for the Airport Improvement Program to enable our airport facilities to accommodate the 70 percent increase in passengers and users of general aviation projected by the FAA.

S. 679, the "Aviation Safety and Improvement Act of 1987," introduced by Senator Danforth, would authorize the Airport Improvement Program for a period of five years at an annual funding level of $2.15 billion. S. 679 would also place a dollar cap of $1.25 billion per year on the amount of the FAA operation and maintenance which could be financed by the airport and airway trust fund.

AGC supports S. 679 and commends its sponsor for crafting a legislative proposal which places much needed emphasis on the expansion of airport capacity as an important part of the solution to the increasing delays being experienced by Airline passengers and users.

Continuing the underfunding of the Airport Improvement Program is unnecessary, given the $5.7 billion in uncommitted balance that will have accumulated in the Airport and Airway Trust Fund by the end of the current fiscal year. AGC believes that the trust fund's considerable cash balance will support an Airport Improvement Program reauthorization of at least $2 billion per year over the course of a five year bill.

AGC is pleased also to offer its view on S. 784, a bill designed to ensure the fair treatment of aviation and highway users, who are paying substantial user fees into the transportation trust funds, and to ensure that these trust funds continue to support the urgently needed capital development of our country's airports and highways.

Senator Kassebaum stated very well the need for a bill such as S. 784 when in introducing the bill, she said:

> When the trust funds for highways and aviation were created, they were created with an understanding that the revenues collected from those using the systems

> would be expended for systems improvements. Today, billions of dollars collected from those who use the nation's highways and airways rest in trust fund accounts for the sole purpose of disguising the size of our annual deficits. This is clearly an abuse of trust that the traveling public is becoming less and less willing to sanction.

AGC wholeheartedly agrees with Senator Kassebaum's assessment, and believes it to be imperative that Congress enact S. 784 to ensure that the dedicated user fees paid by the traveling public are used for their intended purpose. The dedicated funds cannot be used for purposes other than the transportation improvements, as provided by law. Therefore, any budget-enforced savings cannot be used to fund other programs.

Accordingly AGC strongly supports the removal of the aviation trust fund from the Federal unified budget.

I want to thank the subcommittee for the opportunity to present AGC's views on the reauthorization of the airport and airways programs. A detailed written statement has been submitted to the subcommittee for its consideration.

[The statement follows:]

Statement of the Associated General Contractors of America

The Associated General Contractors of America represents more than 32,500 firms, including 8,400 of America's leading general contracting companies which are responsible for the employment of more than 4,000,000 individuals. These member contractors perform more than 80 percent of America's contract construction of airports, commercial buildings, highways, industrial and municipal-utilities facilities.

This statement of the Associated General Contractor of America:

Supports the removal of the transportation trust funds from the Federal unified budget and the exemption of the programs financed by these funds from any across-the-board spending cuts required under the Balanced Budget and Emergency Deficit Control Act of 1985. The monies that have been spent on our Nation's aviation and highway programs have never contributed so much as a penny to the Federal deficit. User fees are collected from the Nation's traveling public, placed in the Airport and Airway and Highway Trust Funds and dedicated, by law, to be spent on the Nation's airports and highways.

Recommends that Congress reauthorize the AIP program for a five-year period, as it has in the past, at an annual funding level of at least $2 billion.

Opposes the Administration's proposed elimination of the National Plan of Integrated Airport Systems (NPIAS).

Opposes H.R. 328 which would amend the Airport and Airway Improvement Act of 1982 by requiring that at least 10 percent of all funds authorized for the Airport Improvement Program under Section 505 be expended on Minority Business Enterprises;

Supports S. 764 which establishes disincentives to countries which deny public works market opportunities to American firms by precluding firms from these foreign countries from participating in projects financed under the Airport and Airway Improvement Act of 1982.

I am Ralph Leonard, a contractor from Stillwater, Maine. I am here today in my capacity as Chairman of the Airports Development Committee of the Associated General Contractors of America. I am accompanied by Highway Division Associate Director Valentin Riva.

Mr. Chairman I would like to take this opportunity, on behalf of AGC's entire membership, to commend this Subcommittee for the leadership it has shown in preserving and enhancing this Nation's airport and airway system. That leadership was clearly displayed in 1982 with the passage of the Airport and Airway Improvement Act, truly a landmark piece of legislation. At AGC we feel secure in the knowledge that this Subcommittee's leadership will again bring forth legislation which properly addresses the many complex and challenging issues facing the Nation's airport and airway system.

Mr. Chairman, I welcome and appreciate this opportunity to inform the Subcommittee of AGC's views on the Administration's legislative proposal on the reauthorization of the Federal airport and airway improvement programs and on the legislation introduced last month by Senators Danforth, Kassebaum and Murkowski. Let me also say at the outset, with regard to the Administration's proposal, that I will largely confine my remarks to the Airport Improvement Program. This is not to say that we are unconcerned about the Airway Improvement Program; nothing could be further from the truth. However, we are quite concerned about the low authorization levels recommended by the Administration for the Airport Improvement Program and the proposed elimination of the National Plan of Integrated Airport Systems (NPIAS).

1. NEEDED INVESTMENT LEVELS FOR THE AIRPORT IMPROVEMENT PROGRAM (AIP)

The situation facing our Nation's airport and airway system is becoming critical. According to the Federal Aviation Administration, more than 696 million passengers are expected to fly on commercial airlines each year by FY 1998. This represents an astounding 70 percent increase from the 409 million passengers which the FAA estimates flew on commercial airlines in FY 1986.

During the same time period, the country's civil aircraft fleet is expected to grow to more than 250,000 as air carriers increase their fleets by about 1,000 airplanes to meet the anticipated demand for air travel and as another 30,000 general aviation aircraft come into operation.

The availability of safe and efficient air transportation depends largely on the continued investment in airport capital development. This will require lengthening and strenghtening runways and building new terminals, gate space, hangars and service facilities. The FAA now estimates that at least $24 billion in capital development will be required through 1995 to meet the increases in demand for air travel. FAA's assessment of the airport capacity improvement needs is supported by the American Transportation Advisory Council in its ATAC-III report. According to the report, "at least $27 billion will be needed to fund the required capital improvements in the nation's airports over the period 1987-1995."

2. APPROPRIATE FEDERAL RESPONSE TO NEEDED INVESTMENT LEVELS

a. Administration's legislative proposal

The Administration's legislative proposal, the "Airport and Airway Enhancement Act of 1987," calls for a two-year reauthorization of the Airport Improvement Program at the current funding level of $1.017 billion. This is significantly less than the approximately $2 billion in annual funding estimated by the Airport Operators Council International to be required for airport capital development. AGC recommends that Congress reauthorize the AIP program for a five-year period, as it has in the past, as opposed to the two-year program reauthorization recommended by the Administration. This would provide much-needed continuity for what is certain to be a critical period for the Airport Improvement Program.

The Administration's proposal reportedly increases the effectiveness of the $1.017 billion provided in annual contract authority by realigning the apportionment formulas for primary airports and states and insular areas. Under present law, apportionments for the approximately 260 "primary" commercial service airports cannot exceed 50 percent of the total amount authorized to be obligated for the fiscal year. Similarly, apportionment to states and insular areas are limited to 12 percent of funding. The balance of the funding constitutes a discretionary fund which is distributed by the Secretary of Transportation subject to certain categorical set-asides for noise compatibility projects, airport system planning, and for improvements at reliever and non-primary airports.

The Administration's proposal would redesignate primary airports as "large commercial service airports" and would reduce the apportionment formula percentage from 50 to 35 percent of the total funds. An additional 43 percent of the contract authority, however, would be made available on a discretionary basis to these "large commercial service airports" and their reliever airports for capacity and safety enhancement projects. The remainder of the total available funds would go to "small commercial service airports" or for apportionment to states and insular areas.

The Administration's proposal may well increase the "effectiveness" of the limited contract authority made available under its funding provisions by providing greater flexibility to the existing apportionment and discretionary fund distribution formulas. However, AGC believes the proposal misses the mark. What is required is not so much a realignment of formulas and the enactment of new definitions, but substantial increases in funding for the Airport Improvement Program to enable our airport facilities to accommodate, in a reasonable fashion, the millions of new passengers and users of general aviation projected by the FAA.

b. S. 679, The "Aviation Safety and Improvement Act of 1987"

S. 679, the "Aviation Safety and Improvement Act of 1987," introduced by Senator Danforth, would reauthorize the Airport Improvement Program (AIP) for a period of five years at an annual funding level of $2.15 billion. Of the $2.15 billion in annual funding provided for the Airport Improvement Program, $700 million would be reserved annually for allocation for airport capacity improvement projects such as runway construction, and $350 million would be allocated annually for noise abatement projects. The remaining $1.1 billion in annual funding for the AIP would be distributed, with some exceptions, in accordance with the existing apportionment and discretionary fund distribution formulas.

S. 679 would also provide $1.5 billion annually for Facilities and Equipment and $200 million annually for Research, Engineering and Development. The bill would also place a dollar cap of $1.25 billion per year on the amount of FAA Operations and Maintenance which could be financed by the Airport and Airway Trust Fund.

AGC supports S. 679 and commends its sponsor for crafting a legislative proposal which places much-needed emphasis on the expansion of airport capacity as an important part of the solution to the increasing delays being experienced by passengers and users of general aviation.

c. Recommended funding level for the Airport Improvement Program

The underfunding of the Airport Improvement Program is unnecessary given the $5.7 billion uncommitted balance that will have accumulated in the Airport and Airway Trust Fund by the end of the current fiscal year. AGC believes that the Trust Fund's considerable cash balance will support an Airport Improvement Program reauthorization of at least $2 billion per year over the course of a five-year bill.

Mr. Chairman, I would like to emphasize that some items in the budget are simply more economically significant in the long-term than others. An important case in point is investment in the Nation's transportation infrastructure. The long-range impact on the Nation's economy of failing to go forward with vital transportation infrastructure projects will be most serious. The loss to the economy of allowing the deterioration of our transportation infrastructure has been clearly demonstrated. These losses are measured by lost economic output, fewer jobs and lower consumer spending for each household.

These negative effects, significant as they are, are only part of the costs which would be inflicted on the economy. Every infrastructure repair delay adds to the eventual cost of that repair. Sacrificing proven and much-needed transportation infrastructure investments for supposed short-term deficit reduction gains will only serve to saddle future generations with a low-growth economy and to create a transportation system burdened with much greater repair and replacement costs. Future generations will be penalized because, at some point, they will be forced to foot the much greater infrastructure repair bill they will inherit as a result of this generation's fiscal short-sightedness.

3. PROPOSED ELIMINATION OF THE NATIONAL PLAN OF INTEGRATED AIRPORT SYSTEMS (NPIAS)

The Airport and Airway Improvement Act of 1982 requires the Secretary of Transportation to publish biennially a national plan for the development of the country's public-use airports. This planning document, popularly known as the "NPIAS," provides a state-by-state breakdown of airport development projects that are eligible to receive Federal funding under the Airport Improvement Program. The inclusion in the NPIAS of a particular airport development project does not represent Federal approval of the project, nor does it constitute a commitment on the part of the Federal government to participate in the cost of the project. The NPIAS is, in fact, a simple yet comprehensive inventory of airport development project costs which serves to identify existing needs in actual dollar terms.

The proposed legislation would eliminate the NPIAS and would require the Secretary of Transportation to publish in its place "a report on the safety and capacity of the national system of airports, which shall describe the current operating characteristics and the future needs of the national system of airports..."

Mr. Chairman, AGC recommends that the NPIAS be retained because of its demonstrated usefulness as a planning document which sets forth airport development needs in terms of actual dollar costs. If a report on "current operating characteristics" is desirable, it could perhaps be published as part of the NPIAS, or as an independent document.

4. REMOVING THE AVIATION AND HIGHWAY TRUST FUNDS FROM THE FEDERAL UNIFIED BUDGET

AGC is pleased to offer its views on S. 784, a bill designed to ensure the fair treatment of aviation and highway users who are paying substantial user fees into the transportation trust funds and to ensure that these trust funds continue to support the urgently needed capital development of our country's airports and highways. Senator Kassebaum stated well the need for a bill such as S. 784 when, in introducing the measure, she said:

"When the trust funds for highways and aviation were created, they were created with an understanding that revenues collected from those using the systems would be expended for systems improvements. Today billions of dollars collected from those who use the Nation's highways and airways rest in trust fund accounts for the sole purpose of disguising the size of our annual deficits. This is clearly an abuse of trust that the traveling public is becoming less and less willing to sanction."

AGC wholeheartedly agrees with Senator Kassebaum's assessment and believes it to be imperative that Congress enact S. 784 to ensure that the dedicated user fees paid in by the traveling public are used for their intended purpose—to improve and rehabilitate our Nation's aviation and highway systems.

S. 784, if enacted, would remove the Aviation and Highway Trust Funds from the Federal unified budget and would exempt the programs financed by these trust funds from any across-the-board spending cuts required under the Balanced Budget and Emergency Deficit Control Act of 1985. AGC strongly supports S. 784. The programs financed by the transportation trust funds are entirely self-supporting since all of their resources are derived from user fees paid in by users of the transportation system, not the general taxpayer. The amount paid in depends on the extent of the use by the individual user. The dedicated funds cannot be used for purposes other than transportation improvements, as provided by law. Therefore, any budget-enforced "savings" cannot be used to fund other programs.

Moreover, unlike open-ended entitlement programs, spending on our Federal highway and aviation programs is limited by authorization legislation regularly passed in both houses and signed into law. The authorizations provide contract authority, a form of direct spending authority comparable to appropriations. Accordingly, they receive the same degree of scrutiny as appropriations acts and can be relied upon to provide the same degree of fiscal restraint provided by appropriations acts in the case of general fund programs.

In 1983, the Congress moved the Social Security trust fund off budget, effective in 1992, so as to base decisions affecting the program on the soundness of the trust fund rather than budget-wide considerations. The transportation trust funds are far more deserving of this treatment because they support regularly authorized programs, are totally self-financed, and have performed well for years.

Accordingly, AGC strongly supports the removal of the Aviation and Highway Trust Funds from the Federal unified budget and the exemption of the programs financed by these funds from any cutbacks in spending required under the Balanced Budget and Emergency Deficit Control Act of 1985.

5. RELATED MATTERS

a. H.R. 328

Mr. Chairman, at this point I would like to make AGC's position clear on H.R. 328, a bill recently introduced in the other Chamber which would amend the Airport and Airway Improvement Act of 1982 by requiring that at least 10 percent of all funds authorized for the Airport Improvement Program under Section 505 be expended on Minority Business Enterprises (MBEs). AGC opposes this legislative proposal and believes it to be improper for the Government to grant special preferences to individuals because they happen to be members of a specially designated racial or ethnic group, and MBE quota and set-aside programs do just that. The Government would do better to direct its energies toward establishing long-term, meaningful educational and training programs for disadvantaged individuals, rather than creating costly discriminatory programs, such as the one called for by H.R. 328. Increased emphasis should instead be placed on the development of programs and services for MBEs in the areas of management, technical and financial assistance. Technical services could include assistance in becoming licensed as a contractor in those states and localities requiring such licensing, understanding bonding requirements and obtaining loans and working capital.

b. S. 764

AGC is also concerned about the procurement practices of certain foreign countries which operate to effectively deny public works market opportunities to American firms. S. 764 would attempt to establish a disincentive to countries which artifically restrict entry into their markets by denying access to the firms of such countries to projects financed under the Airport and Airway Improvement Act of 1982. AGC supports S. 764 as a measured and reasonable response to the increasingly unfavorable policies being adopted by some foreign countries in their efforts to limit the entry of U.S. firms.

Mr. Chairman, that concludes my prepared remarks. Thank you once again for the opportunity and privilege of appearing before you. I would be happy to respond to any questions you may have.

Senator **Ford**. Thank you, Mr. Leonard. And your detailed statement will be included in the record.

I am going to go back to General Bolger just a moment. General, your long-term solution for the current airport and airway capacity problem is the creation of a public corporation to administer FAA programs. Apart from the airlines, what industry support is there for this particular proposal?

Mr. **Bolger**. Basically, it is the airlines, Regional Airlines Association, and we are hoping to solicit some support from the airplane manufacturers, too; and I think we can get that type of support.

Senator **Ford**. You have proposed a funding level for the facilities and equipment account which funds the air traffic control modernization program, of $1.615 billion. This is higher than the administration's proposal.

What have you based your estimate on, and could the FAA effectively spend the money?

Mr. **Bolger**. I think they could effectively spend the money for various purposes. One of the things we are encouraging them to do is, of course, put 500 more air traffic controllers into the system. We believe they are staffing for the anticipation that the NAS plan would have gone in on schedule, but it is not going in on schedule and therefore they ought to be putting more people in training, because they are going to have to operate the current safe but antiquated air traffic control system for a longer period of time.

Such increases to support things like that are very necessary in our opinion.

Senator **Ford**. Have you given any thought to filling the gaps in some of the busier airports? We have seen that it is awful hard to get air traffic controllers to transfer from Pensacola, Florida, to Chicago O'Hare. Do you have anything that might be an incentive program to maybe move or help increase the controllers in those densely populated areas?

Mr. **Bolger**. In our NAA proposal, we would eliminate some of the constrictions we currently have on the civil service system. The civil service system prevents the agency, we believe, from offering these types of incentives of extra reimbursement for moves, as you might do in the private sector, to go to what people may consider an undesirable area in which to live and work, particularly when they are going at the same grade level.

I think you could take these compensations and put them into place and make it attractive for people to move. I have done this in my earlier life, when we had that authority, moved people all over the country into areas that they normally would not have wanted to move to, because I made compensation packages attractive for them to do so, even to the extent that when we needed somebody for a few years at a given location, give them the incentives, but also guaranteed them we would move them back if there was not some reason to remove them for cause.

Senator FORD. Thank you, General.

Now, Mr. Cloud, you have proposed an entitlement program for cargo hub airports. You state this would result in benefits to the entire system. How many airports would benefit from a cargo entitlements program?

Mr. CLOUD. There are two different proposals now on the table, one which has to do with the number of landings made by cargo aircraft and another to do with landed weight. It appears to me that under those circumstances, under one of those two alternatives it is quite possible that every airport with cargo activity would benefit from this specific funding.

Senator FORD. When you talk about landing weight, is that the carrier passenger aircraft that would benefit from that?

Mr. CLOUD. Yes, I do believe that that would include the weight of the cargo, though I am not quite certain about that, sir.

Senator FORD. Let me get to Mr. Leonard. The little caution light has gone on. I want to try to stay within the time limits.

How would the proposed elimination of the National Plan of Integrated Airport Systems hinder the FAA's ability to identify needed airport expansion projects?

Mr. LEONARD. Well, in my opinion that could possibly avoid a very important consideration that should come into play for a national program, and that is the input from the State level. It may not happen, but in my opinion that is a viable tool that, if they want to have an overall view by the administration, that it could supplement the NPIAS rather than just replace it.

Senator FORD. You have proposed an AIP funding level of $2 billion and you stated how you came up with that estimate. You have endorsed Senator Danforth's proposal, which is somewhat different from the administration's proposal.

I am sure, Mr. Leonard, your are aware of the problem we face here with the Gramm-Rudman-Hollings legislation and the administration's desire not to spend trust fund money because that helps hold down the deficit. As Senator Kassebaum was quoted, the public expected and we all expected when we paid the tax that went into that trust fund that we would be the recipient of the benefit of paying that tax by improvements.

How much help from the general public do you think Senator Danforth could get for his bill, and do you think it would be sufficient to move that bill through Congress?

Mr. LEONARD. I think the public is largely unaware of what has happened with the trust fund, and we are making a great effort in the aviation industry and the construction industry to make the public aware of this.

I think when the awareness program takes place that there is going to be great general demand from the public to support a bill such as Senator Danforth's.

Senator **Ford**. Well, Mr. Leonard, we read in the paper every day about, at least we hear about it every day, airport delays, about near-misses in Florida, and all of the other hazards of flying. Yet the public does not seem to be concerned about busting the trust fund.

Mr. **Leonard**. I do not think the public is generally aware, number one, that eight percent of that ticket has gone into a trust fund; and that, number two, it is not being spent. I just think the public is not aware of that, and a program has got to be put in place to make them aware of it.

I think that until that happens, you are not going to get your mail box flooded. And there is a program under way right now of an organization of aviation associations which is dedicated to making the public aware of this.

Senator **Ford**. Thank you very much, gentlemen.

Senator Kassebaum.

Senator **Kassebaum**. Well, all of you are speaking basically to the need to create greater airport capacity, and that I think is something that we would all agree with. I am pleased, Mr. Leonard, to hear your support for S. 784. I would like to see it succeed, and maybe one way to get support for Senator Danforth's bill would be to put a little box in the line of traffic at one of the hubs where everybody is, about 11:00 o'clock at night, running down the hall trying to make it from one plane to the next connecting flight, and usually with five minutes to get about ten miles.

I just did it last weekend, so that is why I think you could have caught a lot of us at that point who would have put a note in a suggestion box. But I do not know that that necessarily helps us with the answer that we have to address here.

One major question we face is how do we spend the trust fund on airport and system improvements. The administration this year, of course, has recommended that a significant amount of money come from the trust fund. What really has not been answered, it seems to me, is—we have reviewed this in both the Budget Committee and here—is what proportion of the FAA's budget should come from the trust fund.

And currently, as you know, about 25 percent of the trust fund is spent on operation and management. The administration would recommend for next year's budget that 75 percent of the trust fund go to O&M. I think an argument can be made—and Mr. Cloud, you stated this—that this is a national issue, and that if we do believe that a strong airway system is a national issue then general revenue moneys should support this system, they have in past years.

What concerns me is that if we begin to move away from this system that, at some point, capital improvements are going to get the short end of the stick. Our job is to determine a proper balance for funding O&M.

I personally am concerned about the shift in funding and I do believe there is a case to be made for using general revenue funds for this purpose. It has not been an easy case to make. However, when it came to the question of our deciding priorities here in the authorizing committee, we have always attempted to maximize the use of the trust fund for capital improvements.

However, as these programs have gone through the appropriations process, of course, they have lost out.

Mr. Bolger, I would like to ask you again about the ATA's proposal for meeting some of these concerns through creation of a partially independent authority, particularly as it addresses air traffic controller staffing. I agree with your assessment. I guess I have never been certain how an independent authority is necessarily going to be able to solve the funding problem, because you will have to decide, if you want more air traffic controllers again, how that pie is going to be divided up.

Would we not continue to face similar problems?

Mr. BOLGER. There will be similar problems. There would be more readily available solutions. The authority would have the independence, for instance, if we needed some capital money in this authority, they could borrow. They do not borrow today.

What you are actually doing is imposing all the costs in the year you purchase the equipment, whereas the equipment may last for 10 or 15 years. You could do some capital borrowing, which would lessen the impact immediately for funding from the taxes or the user fees.

Senator KASSEBAUM. But at some point might you not have to look to increased user fees? I mean, will this not be an easier way to increase those taxes?

Mr. BOLGER. Well, you may at some point. None of us can predict what is going to happen to the finances of the country in the future. Inflation could have an impact of that type.

But looking at it, if we get this system operating more efficiently, if we get a modernized system in, if we get an automated system into effect, I think we are going to have some efficiencies of scale in there and also some offsetting of costs compared to what we have today.

I do not believe that the air traffic control staffing has to grow with the growth of aviation if you have a modern, automated system that lets an air traffic controller handle more traffic more efficiently. We are recommending the additional staffing now because there is no other solution. The need is growing with an antiquated system and the only way you can correct that is to put enough sufficiently well trained, efficient, controllers in. You just cannot do anything else in that short a time.

Senator KASSEBAUM. But is that just a funding problem? Would you not still have to meet some of the problems of recruitment and training?

Mr. BOLGER. Yes, and I think you could do that very well. I think some of the restrictions you have in recruiting today—I do not think the recruiting done by the old civil service arrangements is the best way you can go. I think you can expedite recruiting.

I think you can probably do a better job of attracting people in the service, because you would create some incentives to keep them in the service. Basically, today the controller work force, you are telling them in effect: You get 20 years in or you get 50 years of age, go out. And I am not sure that is the right way to go.

Senator KASSEBAUM. Just one other question. Do most of you have some concern about a shift to a block grant proposal for the States? You touched on that.

Mr. **Bolger**. I have just one concern. We can always point out that there would be another level of bureaucracy. That is, like almost anything, I guess it probably could happen. But I think what we need when we are looking at commercial aviation, we are looking at the need to have airports that are properly administered.

And while this does not cover, the block grant does not cover, the general and commercial aviation airports, it does cover the reliever airports. And we think they should be continued as part of the national system and not be turned over to the States.

I have one thing I would like to insert here on airport improvement. I do not remember if my full statement supports the notion of having some $25 million increase for R&D for airport improvements. If it does not, I want to make sure that we go on record here that we do support that, as Mr. Reilly suggested we should have.

Senator **Kassebaum**. Any other comments? Mr. Leonard, I believe you addressed these points.

Mr. **Leonard**. On the block grant, we have some concern there, of course. But our attention has been mostly directed to the fact of underfunding, and how they put the money across has not really come under the contractor's domain as much as the fact that it is so severely underfunded that the block grant is not going to solve the problem without additional funding.

Mr. **Cloud**. And Federal Express believes, and make no bones about it, that the national system is one that must be administered by a single entity. We today at Federal Express experience various moves to restrict aviation throughout this country.

The restrictions are terribly different at airports throughout the country. We can operate certain of our aircraft in certain airports, we are not allowed to operate certain of those aircraft into certain airports. Once some of the communities discover that their current regulation allows our operation into their airports, they change the regulations so as to preclude operations.

Again, this is a national system that is not receiving national attention. If each community were able to regulate railroad noise as they are apparently able to regulate aviation noise, your entire transportation system in rail would stop.

And that is what we see as happening in the aviation industry. We are very concerned about turning over any more responsibility for the national system to the local entities.

Senator **Kassebaum**. Thank you very much, Mr. Chairman.

Senator **Ford**. Let me ask a question as it relates to that. Would not the local communities have a right to pass an ordinance or law that would put a level on noise beyond what the Federal government might be able to do?

Mr. **Cloud**. Do they now have the right? There is a very clear dispute about what those rights are, quite frankly. I have studied that issue any number of times. I am not too sure I understand precisely what the local obligations and responsibilities are and what the requirements of the Federal government are under those circumstances.

There is a valid argument, I think, that the Federal government has the right to make such determinations today. There also, I think, is a reasonably valid argument on the reverse side. It is a very unclear situation today about who is in control.

Mr. BOLGER. I guess one thing is that the local and State governments and regional authorities are making those impositions today. And very frankly, one of the major questions is when they are looking at the total system, where is the Federal government's role?

We think they do have a role in it in order to do something about it and so keep the system together as a national system.

Senator FORD. Well, I have heard that there are some local ordinances or stricter restrictions than normal, and those airplanes that are quieter are all going into that one airport. Then that increases the noise level on others. This does not provide continuity throughout the system.

That scenario lends itself to one national system and one national program. We will be holding a hearing on the 20th of April in Denver, and I suspect that the problem of local noise restrictions will come up in Denver.

Mr. CLOUD. Might I give you an example, Mr. Chairman? We purchase our DC-10 aircraft, manufactured in Long Beach, California. We pay something on the order of $60 million an aircraft. We fly those aircraft out of the Long Beach Airport, and Long Beach then precludes us from flying the aircraft back into the city.

It is an amazing situation as far as we are concerned. As a matter of fact, I think they have now terminated the use of Cessna aircraft into there by lowering their noise levels as they see fit on a local basis.

Again, it is a severe problem in terms of developing a system that serves 100 percent of the U.S. population, trying to adjust to each local situation where individuals are definitely impacted by noise. There is a noise problem and it does impact individuals in each of those cities, and that problem needs to be addressed without any question.

But the Federal government needs to be very heavily involved in making the determination about what should be done from a national perspective.

Senator FORD. Well, I think I will suggest in my State that they build a plant there, and I will guarantee you, if you fly out of there you can fly back in.

Senator KASSEBAUM. You can do that in Kansas.

Senator FORD. He was talking about Cessna levels a minute ago, was he not.

Do you have any other questions?

Senator KASSEBAUM. No.

Senator FORD. We thank you, gentlemen, for being here today. We look forward to working with you.

This concludes our hearing for today, and we look forward to seeing all of you at our next hearing.

[Whereupon, at 12:20 p.m., the subcommittee was adjourned.]

AUTHORIZATION OF THE AIRPORT AND AIRWAY TRUST FUND

WEDNESDAY, APRIL 8, 1987

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
SUBCOMMITTEE ON AVIATION,
Washington, DC.

The subcommittee met, pursuant to notice, at 9:35 a.m. in room SR-253, Russell Senate Office Building, Hon. Wendell H. Ford [chairman of the subcommittee] presiding.

OPENING STATEMENT BY SENATOR FORD

Senator FORD. Good morning, ladies and gentlemen. The Aviation Subcommittee today continues hearings on the reauthorization of the Airport and Airways Trust Fund, focusing on the FAA's National Airspace System program. This eleven year, $16 billion program is designed to modernize and automate the nation's air traffic control, navigation and communications system.

This program, which will significantly enhance aviation safety and increase efficiency, was first approved by the Congress in 1982. Since that time, however, we have increasingly seen slippage in the implementation schedules of many of these projects.

Some have attributed this to insufficient funding, while others claim that the FAA established an overly optimistic time frame for implementation. Whatever the reason, it is the subcommittee's job to review the FAA's progress and ensure that the modernization program remains on schedule. This hearing will help us do that in a timely fashion.

Before we begin this morning, I want to apologize to those groups who have been asked to submit their testimony for the record today, rather than appearing in person. This was unavoidable, given the Senate floor schedule. But I can assure them that their testimony will appear in our hearing record and that we will carefully review each group's recommendation.

Senator Kassebaum, welcome. We are delighted to see you this morning. Do you have a statement you would like to make?

OPENING STATEMENT BY SENATOR KASSEBAUM

Senator KASSEBAUM. Yes, I do, Mr. Chairman, briefly, because I do think this is a very important hearing, and unfortunately we are marking up in the Foreign Relations Committee this morning as well, and so I will not be able to stay for the full hearing.

But of all the issues that this committee must address in the reauthorization, none I believe will be as critical or as complicated as those on which we will take testimony today. And as I say, I regret not being able to be here to hear all of it.

The National Airspace System Plan issued by the FAA in December of 1981 constituted a master plan for sweeping modernization of virtually every technical aspect of the FAA operations. The promise of that plan was a safe, efficient, modern airspace system that would take us soaring into the next century.

Suffice it to say, things somehow always seem to work out better on paper than they do in practice. In the case of the NAS plan, a long series of GAO reports have documented what many of us have suspected all along: We are spending a lot of trust fund money on a modernization effort that, while long on vision, appears to be at times woefully short on direction.

The ILS/MLS situation is a well known example. MLS deliveries are way behind schedule. The software for the system is plagued with problems. Yet, because the NAS plan calls for the new system, FAA support for ILS installation has become all but a thing of the past. We now have a situation where there is no official Federal support for the installation of any workable precision landing system.

The continuing debate over the traffic alert and collision avoidance system, TCAS, appears to be as far from resolution as ever. The automated weather observation system is now two years behind schedule. The advanced automation system, which is absolutely vital to capacity enhancement, is, I am beginning to think, never going to be put on line.

I mention these matters, Mr. Chairman, to make a point, actually two points. First, technological innovation is wonderful and necessary, but there comes a time when innovation should take a rest and deployment should begin. Rather than waiting to secure the last ounce of innovation from new systems, we should begin deployment where significant safety or capacity advantages over current systems could be achieved. We should not let the perfect become the enemy of the good.

The second and final point I would like to make relates to those systems where deployment has been delayed, not because of possible further technological advances, but because of the lack of any significant advances at all. If the problem in such cases is simply an inadequate flow of funds into the projects, then every effort should be made to rectify that situation.

If, on the other hand, the problem is that we were wildly optimistic in our technological expectations, now is the time to remove such programs from the NAS plan. The National Airspace System plan that was laid out in 1981 was a good one. I hope that, working together, we can get it back on track.

Thank you, Mr. Chairman.

Senator Ford. Thank you, Senator Kassebaum.

Senator Exon.

OPENING STATEMENT BY SENATOR EXON

Senator Exon. Nothing other than to congratulate you, Mr. Chairman, for holding this tremendously important matter. And I am looking forward to the testimony of the witnesses.

I would remind our good colleague from Kansas that not only does Senator Kassebaum, according to her words, have a markup in Foreign Relations at 10:00 o'clock, she also has a markup in Budget at 10:00 o'clock, which indicates that we have a very busy morning around here.

I too will have to review the testimony in detail after it is given from our expert witnesses this morning.

Now, I certainly echo the words that it is time to obtain an airspace system, whether we have one or not. I do not think the one we have now is working very well. Some changes have to be made.

We appreciate your being here, both this panel and the second one, to help us out in our deliberations.

Thank you, Mr. Chairman.

Senator Ford. Thank you, Senator.

Senator Stevens, do you have a statement you would like to make this morning?

OPENING STATEMENT BY SENATOR STEVENS

Senator Stevens. Mr. Chairman, I am pleased to be here, and I plan to review the testimony carefully. I have an Appropriations hearing I must attend, but I do congratulate you also for holding a hearing on these important issues. And I hope that the FAA is going to take the criticism that it is receiving from the GAO and others in good grace, because it is not just the FAA; all of us who are involved in this system have condoned delays here over a period of time, and now we have got to find some way to avoid them in the future.

But I do appreciate your holding the hearings.

Senator Ford. Thank you, Senator.

I have a statement from Senator Hollings that I will include in the record.

[The statement follows:]

Opening Statement by the Chairman

Mr. Chairman, yesterday the Aviation Subcommittee heard testimony concerning the reauthorization of the Airport Improvement Program. Today, we must determine to what extent money from the Trust Fund will be authorized to find what is probably the nerve center of our aviation system—the National Airspace System Plan.

Initiated in 1982, the NAS Plan calls for the complete modernization and automation of the nation's air traffic control, navigation, and communication systems. However, since its beginning, implementation of the NAS Plan has been plagued by numerous delays. A major factor in causing these delays has been the fact that the NAS Plan has been consistently appropriated at levels below the authorized amounts. Many have suggested that this has resulted from efforts by the Administration to reduce the budget deficit. Regardless of the political reasons supporting this policy, it has led to an air traffic control system replete with outdated technology, overworked staffs, and congested airspace. This combined with the geometric growth in both the number of air travelers, has called into question the continued safety of our air transportation system.

There is enough money to correct this problem. The current uncommitted surplus in the Trust Fund is approximately $5 billion. And we must find a way to ensure that the NAS Plan is adequately funded.

I look forward to the testimony of today's witnesses. We need the guidance that these groups can provide. I urge the Committee to act quickly in approving an authorization bill which will ensure the timely implementation of the NAS plan.

Senator FORD. Our first witnesses this morning are Martin Pozesky, Deputy Associate Administrator for Development and Logistics, FAA; and Mr. Herbert R. McClure, Associate Director, Resources, Community, and Economic Development Division, General Accounting Office, accompanied by Dr. Carl Palmer, who is Associate Diector, Information Management and Technology Division.

Marty, you can go first.

STATEMENTS OF MARTIN POZESKY, DEPUTY ASSOCIATE ADMINISTRATOR FOR DEVELOPMENT AND LOGISTICS, FEDERAL AVIATION ADMINISTRATION, ACCOMPANIED BY NORBERT OWENS, DEPUTY ASSOCIATE ADMINISTRATOR FOR AIR TRAFFIC; HERBERT R. McLURE, ASSOCIATE DIRECTOR, RESOURCES, COMMUNITY, AND ECONOMIC DEVELOPMENT DIVISION, GENERAL ACCOUNTING OFFICE, ACCOMPANIED BY DR. CARL PALMER, ASSOCIATE DIRECTOR, INFORMATION MANAGEMENT AND TECHNOLOGY DIVISION; AND CHARLES S. COTTON

Mr. POZESKY. Thank you, Mr. Chairman.

I will try to make my remarks brief in the interest of the schedule this morning and submit my full testimony for the record.

I am Martin Pozesky, the Acting Deputy Associate Administrator for the NAS program. Norbert Owens, the Deputy Associate for Air Traffic, is with me. I am very pleased to be here today to discuss the National Airspace System plan, its progress, and its achievements, and also allude to some of the problems that we have had.

First I would like to say clearly that the NAS plan is a massive and complex undertaking. The NAS plan itself consists of over 90 separate and individual and integrated projects. There has been substantial progress in this.

The plan replaces about 22,000 individual air traffic control facilities and about 100,000 separate pieces of equipment. It requires a sizable investment. But also, we believe the return on that investment is sizable, some $26 billion in FAA operating and maintenance savings over the next 25 years and another $37 billion in aviation community safety and efficiency benefits.

It also employs roughly 20,000 to 30,000 people in the high technology industry and offers a potential for helping in our balance of payments, because much of the equipment and the technology we develop is used worldwide for air traffic control.

The plan's achievements have been substantial. Of the 90 projects, 14 percent are already complete. 70 percent of the NAS plan projects are under contract. 4400 individual equipment components have already been delivered to the field. By the end of this fiscal year, about 88 percent of the major NAS plan programs will be underway.

We are proud of the fact that the first Host computer system, the first key element in our computer modernization system, was delivered to the Seattle air traffic control center in 1986. The Host comes from a family of new computer hardware and will use existing air traffic control system. It is the first of our entirely new generation.

It will significantly improve the capacity and the processing capability of our computers. Successive deliveries of the Host are currently proceeding. Equipment has been delivered to Denver and Houston and the installation rate will approximate about two a month for the rest of this year.

We hope to have the first Host commissioned in late May of this year, and have them all in operating status by late 1988.

An equally important achievement is wind shear. The low level wind shear alert system is a key element, and it provides protection to aircraft operating against that invisible threat. We have contracted for 110 systems, of which 92 are presently in operation.

I think the committee is also familiar with the flight service station system which is presently being implemented, and we are about halfway through with that one as well.

From a telecommunications viewpoint, we are well on the way and have begun the implementation of what is probably going to be the largest civil microwave telecommunications system in the country. We are criss-crossing the country with over 1,000 telecommunications repeaters to support air traffic control needs.

In response to the concerns of the Congress and of the GAO, we are proposing a modification to the advanced acquisition program, and we are working with the Congress, both on the House and the Senate, to achieve agreement on that proposed strategy.

The plan has in fact received strong Congressional support. For the last five years, appropriation has been under the authorization levels, and I am constantly asked, how much that has contributed to delays.

There is no question that we have had to work around those shortages. We have moved some programs across the fiscal year. We have deferred some programs. But if you are asking for a global perception, I would say that most of the major technical delays we have encountered are really of the technical nature.

We have had to overcome software and engineering problems. We are doing that. We are battling our way through these programs and problems, and once we get on the other side of those problems the funding will become a major contributor to our being able to continue on schedule.

And that primarily is the reason for our strong belief that we need the fiscal year 1988 and fiscal year 1989 levels proposed in the reauthorization to continue the program.

Mr. Chairman, we have made some internal management adjustments to improve our ability to track and manage programs. Those are characterized in my statement, and I would be happy to submit the rest of the statement for the record and respond to any questions you may have.

[The statement follows:]

STATEMENT OF MARTIN T. POZESKY, ACTING DEPUTY ASSOCIATE ADMINISTRATOR FOR NAS PROGRAMS, FEDERAL AVIATION ADMINISTRATION

Mr. Chairman and Members of the Subcommittee: I am Martin Pozesky, Acting Deputy Associate Administrator for NAS Programs. With me is Norbert Owens, the Deputy Associate Administrator for Air Traffic.

I am pleased to appear here today to discuss the Federal Aviation Administration's (FAA) National Airspace System (NAS) Plan. Since its inception, there have been significant NAS Plan accomplishments. However, there are still many challenges before us. I appreciate the opportunity to discuss these with you.

NAS PLAN OVERVIEW

The Federal Aviation Administration, jointly with the aviation community, developed the NAS Plan to replace outmoded and labor-intensive facilities and equipment, enhance safety, increase system capacity, and improve the timeliness and dissemination of weather data to serve the air transportation industry into the next century.

The NAS Plan is a capital investment program that takes the air traffic control system from vacuum tube to modern electronic technology. It is a massive and complex undertaking that upgrades virtually all aspects of the air traffic control system and, through the implementation of some 90 projects, replaces about 22,000 facilities comprising the U.S. Air Traffic Control System. These projects range from runway light replacements to new air traffic control computers, and include specialized ground-to-air maintenance and communications systems.

The NAS Plan requires a sizeable investment, but the return on this investment is also impressive. The implementation and successful completion of the NAS Plan will save an estimated $26 billion in FAA operating and maintenance costs over the next 25 years. Another $37 billion will be saved by the aviation community in safety and efficiency benefits. It has also been estimated conservatively that 20,000 to 30,000 people are employed in the high technology directly related to NAS Plan improvements. There are substantial trade and international benefits as well, since much of the new NAS equipment will set the standards for aviation systems around the world and offer business opportunities to U.S. industries abroad.

NAS PLAN ACCOMPLISHMENTS

NAS Plan achievements have been substantial. Fourteen percent of the NAS Plan projects are nearly complete. Over 70 percent of all NAS Plan projects are under contract. Over 4,400 individual equipment components have already been delivered to the field. By the end of this fiscal year, more than 90 percent of the NAS Plan programs will be underway.

Projects such as the Phase I Traffic Management System, replacement of the flight strip printers, communication systems modernization, integration of nonradar approach controls into radar facilities, ARTS-II interfacility interface, VORTAC and other solid-state replacement programs have allowed us to achieve significant productivity gains in our Systems Maintenance and Air Traffic Controller work forces.

We are justifiably proud that the first Host computer system was delivered to the Seattle Air Route Traffic Control Center in November, 1986. The Host, which comes from a family of new computer hardware, will use existing air traffic control software. It is the first of what will be an entirely new generation of air traffic control computers.

The Host will increase the capacity of today's computers by at least four times . . . and their processing speed by about ten times. Its solid-state components will significantly improve system reliability and eliminate maintenance problems with the present outdated equipment. Successive deliveries of the Host are proceeding on schedule. In all, 20 air route traffic control centers will have a Host system delivered by the end of 1987 and will have them in operation by mid-1988.

An equally important NAS Plan achievement has attacked an invisible threat: wind shear. The best defense from wind shear is knowing that it is there . . . and avoiding it. The Low Level Wind Shear Alert System is one means available to alert the controller when hazardous conditions are detected. We have contracted for 10 Low Level Wind Shear Alert Systems. There are 92 presently in operation and the balance will be installed during this fiscal year.

The successful commissioning of the Altoona, Pennsylvania, Automated Flight Service Station (AFSS) in March, brings us up to 28 AFSS's and 12 Flight Service Data Processing Systems operating with upgraded technology called Model 1. Two additional commissionings will take place this month. We expect the last Model 1 system to be commissioned by the tend of the fiscal year.

We are planning to increase the capacity of the Model I system and deliver equipment to all AFSS's to provide a basic level of services. We will be going to the private sector for two key features of automation. The first is color weather graphics for use by our specialists, and the second is direct pilot access to the weather data base and for filing flight plans.

We are well into implementation of what is likely to be the largest civil microwave telecommunications system in the country. We are criss-crossing the country with a highly reliable, extensive network of telecommunications transmission systems to increase capacity as well as to contain costs.

We have proposed a modification to the acquisition approach for the Advanced Automation System to provide time for additional engineering design requested by the contractors, as well as to accommodate Congressional concerns that additional testing be conducted before the production go-ahead is issued.

A comprehensive list of our accomplishments is attached for your review. The message I want to leave with you is that momentum clearly is building, and we are well on our way to achieving our NAS Plan goals.

NAS PLAN FUNDING

The authorizing legislation for the first 5 years of the NAS Plan, as established by the Airport and Airway Improvement Act of 1982, totaled $6.3 billion, which is funded entirely from the Airport and Airway Trust Fund. Appropriations have been approximately $1.6 billion below the authorized levels during this 5-year period.

We accommodated these reductions through a series of management actions intended to protect the core or critical elements of the NAS Plan. These actions included deferring some lower priority modernization or improvement projects to future years, delaying deliveries of some projects, and selectively taking three projects of full funding in FY 1987 rather than deleting complete programs. We also were able to accommodate the lower funding levels in part because, quite frankly, we had been overly optimistic when we developed the original schedules for some NAS plan projects.

In the near-term, these management actions eased the negative impact of the funding reductions, but the reductions contributed to the buildup of resources required in the coming years to complete the NAS Plan.

Our FY 1988 budget request for Facilities and Equipment is $1.35 billion—the same amount proposed in the post 1987 legislative proposal the Secretary has transmitted to the Congress. It provides funding for such important programs as the Next Generation Weather Radar, Terminal Doppler Weather Radar, additional radio control equipment, tower replacements, an improved traffic management system, radio communication links, Advanced Automation System, and many smaller, but equally important projects.

The legislative proposal seeks $1.5 billion for FY 1989 in authorized funding levels, plus a separate authorization of not more than $200 million over the 2 years as a risk reserve. With these authorizations, we will be virtually back on target with our projected funding needs to implement the National Airspace System Plan.

NAS PLAN PROGRESS

There is no question that there have been slippages in some NAS Plan programs and there are reasons for those slippages. In its March 1987 report, the General Accounting Office stated that the FAA has experienced cost increases and schedule delays of up to 7 years on 11 major NAS Plan programs. The GAO report is generally accurate, but does contain some errors in the schedule and financial tables.

A list is attached [1] to this statement which identifies the 11 programs questioned by GAO and our analysis of the degree of delay and the reasons for those delays.

As you will see from the list, several programs encountered difficulty in the area of software development—a problem universally experienced through the industry. Nonetheless, we have and are continuing to overcome these development problems. We are battling our way through these problems jointly with the industry, and we are succeeding. We will continue to resolve these difficulties if and when they arise.

The issue of program costs and cost overruns is one area in which I believe GAO in some cases has presented misleading data. I do not want to belabor the issue but would like to give one example of how program costs have been analyzed by the GAO and what conclusions were reached. In the March 1987 report, the GAO said that the first estimated cost for the Airport Surveillance Radar (ASR) replacement program was $154 million and that the 1986 estimate was $606 million. The $154 million estimate was made using constant 1978 dollars while the $606 million estimate was based on inflation adjusted 1986 dollars.

Furthermore, when the ASR replacement program was conceived in 1978, the $154 million cost in 1978 dollars only included replacement of 96 ASR-4/5/6 vacuum-tube radars with ASR-7/8/9 solid-state radars. In contrast, the program involved in 1986 all of the elements just mentioned as well as the purchase and installation of new radars for airports where traffic volume warranted. Also included was a leapfrog strategy. By this I mean purchasing the most advanced radar, ASR-9, and installing it at airports with the most need. Following this, taking the radar system that was used at that airport, and moving and installing it at an airport location with less need but with a badly outdated radar system. By doing this, we are making maximum use of all radar equipment while at the same time recognizing that different airports have different needs. It is clear that the 1978 and 1986 ASR replacement programs were very different.

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[1] The list was not reproducible.

The overall NAS Plan estimates have not varied significantly since 1982. In fact, in April 1983, we had firmed up the 10-year cost of the plan at $11.7 billion. This estimate changed only when we added the Terminal Doppler Weather Radar program last year. As individual projects have experienced overruns or underruns, we have accommodated the adjustments within the planned 10-year cost estimate.

The GAO concluded in its report that DOT and FAA have recognized weaknesses in FAA's major system acquisition process and have taken steps to improve that process. They credit us for revising our acquisition directives to incorporate improved management policies and procedures and for tailoring them with the requirements and principles of OMB Circular A-109. The GAO also noted that the FAA has taken a number of actions to create better internal management controls over the total acquisition process. Mr. Chairman, these management controls are working.

NAS MID-COURSE ADJUSTMENTS

We are now well into the first stages of implementation of the NAS Plan. Thus, the center of gravity is shifting from planning and contracting to delivery of equipment, and testing and field installation. In recognition of this, we have made several mid-course adjustments to our internal approach to NAS activities.

We recently conducted an internal review of the System Engineering and Integration (SEI) contractor's responsibilities with the objective of streamlining and focusing the SEI role. As a result, we have assigned technical direction responsibility for six NAS Plan projects to the SEI. This is in addition to the program management, system engineering and integration, and project support functions that the contractor has been performing. We also are taking action to reemphasize SEI involvement in field-level engineering and system integration activities. This is all being done by reprioritizing the SEI activities within the scope of the current SEI program.

In its report on the Department of Transportation's Fiscal Year 1987 Appropriations Bill, the Appropriations Committee asked the FAA to provide it an objective evaluation of the SEI Contractor's overall performance and to identify alternatives to the existing contractual agreement. Our report to the Committee will address these concerns fully.

Mr. Chairman, as you know, I have had my current responsibilities only a very short time but my personal view is that the SEI's performance has been good and is getting better. In retrospect, we were probably unrealistic to expect that a contract of this size and scope would be integrated into our NAS organization almost instantly without a learning curve or start-up problems. Our internal staff was about 400 and the SEI contractor's personnel more than doubled that resource.

We have overcome these start-up problems and the SEI has become an important partner in our national approach to NAS development and implementation. Without question, we could not do this job alone. They helped us introduce processes and disciplines into our internal organization which are now paying dividends. We are focusing stricter attention on application of these internal processes to help manage costs, schedules, and project content.

I mentioned earlier that we have delivered some 4,400 equipment components. We are now approaching the phase where more attention will be placed on the challenge of system implementation—that is the installation and integration of the individual NAS program elements that are being delivered. To date, we have begun to implement 47 percent of the NAS Plan projects.

The one-time workload associated with site preparation, "hands-on" installation, and test of the new NAS equipment will require substantial assistance above and beyond the existing level of FAA's regional Facilities and Equipment personnel. To meet this need, we will contract competitively for a national Technical Support Services contract to assist us in this task.

The contract is estimated to cost up to $400 million and is within the scope of current NAS Plan overall cost estimates. Although established on a national basis, the Technical Support Services contractor will operate under the direction of our regional offices providing support necessary to accomplish NAS equipment implementation efforts.

This approach will allow us to ensure the engineering and design integrity of the whole NAS modernization effort, while providing significant additional opportunities for participation by the private sector.

OTHER CAPITAL NEEDS

This year's update of the NAS Plan will contain a new chapter describing the agency's capital needs above those contained in the funding estimates for the original NAS Plan. This chapter recognizes what we have always known . . . as the implementation of the NAS Plan progresses, other capital needs become apparent that are candidates for funding within the F&E appropriation.

For example, in the near-term we need to replace the underground fuel tanks for many of our engine generator back-up facilities. We also see the need to replace the tactical air navigation antennas as well as data multiplexing modems.

Aviation growth and demand for better services require continued long-term capital improvement to the national airspace system beyond that provided by the NAS Plan. The challenging decisions for future improvement will be to find the best approaches to improving safety and security, extending services, increasing capacity, and reducing delays.

The NAS Plan provides a solid foundation for further improvements to meet future requirements. As we move from the present to the future, additional opportunities to enhance safety, avoid costs, increase system reliability, or improve system performance will be identified. These improvements will be achieved by a balanced program which introduces new technology and systems, exploits future technology opportunities, enhances NAS Plan provided hardware and software, or deploys additional amounts of established NAS Plan technology.

As these initiatives are approved, they will be covered in a separate chapter of the NAS Plan. This will give us accountability for the original NAS Plan while presenting a complete description of all projects contending for F&E funds.

Mr. Chairman, this concludes my prepared remarks. I will be pleased to respond to your questions.

[The following information was subsequently received for the record:]

May 6, 1987.

Hon. Nancy Landon Kassebaum,
Subcommittee on Aviation, Committee on Commerce, Science, and Transportation, United States Senate, Washington, DC.

Dear Nancy: This is in reply to your April 15 letter seeking the Federal Aviation Administration's (FAA) response to a question concerning the Advanced Automation System. That question and my response are outlined below.

Question. As you know, the General Accounting Office (GAO) has been extremely of FAA plans for modernization of the air traffic control computer system. Specifically, GAO contends that the risks associated with the FAA's strategy for acquisition and deployment of the Advanced Automation System (AAS) are significant. They cited the cumulative of redesignating the software, using new computer language, designing a system with very high availability requirements, replacing the hardware, incorporating new automated functions, and interfacing with other systems still in development. Has the FAA made any changes in the plans for deployment of the system since the GAO report has issued?

FAA Response. We have recently made extensive changes in the acquisition and implementation plans for the AAS. Our replanning efforts have directly addressed the criticism of the GAO, as well as our own concerns about cost growth and schedule slipped of this vital program.

The FAA managers who are responible for the AAS Program have worked hard with the GAO to understand the details of the GAO criticisms; explain the rationale for the FAA's revised plan that deals with the critical issues; and reach an agreement on the approach that strikes a balance between the GAO and FAA positions.

We believe that we have now achieved a basic agreement on the revised acquisition strategy for AAS and the methods for managing program risks.

The following explains how the replanned program addresses the risk questions raised by the GAO.

1. *Redesignating Software with a New Programming Language.*—The computer program language called Ada has been recommended by both AAS contractors. To assess the risk of using Ada, the FAA assembled a team of some of the Nation's top experts to advise us on this issue. The members of the team unanimously recommended that we use Ada. They also recommended that we initiate several risk mitigation tasks in the design competition phase, and these tasks have now been added to our contracts.

2. *High Availability Requirements.*—The very high air traffic control service availability requirements represent a design challenge to our contractors in structuring the software and hardware design for the AAS. We believe the requirements are achievable and are necessary. One major reason is that the host computers, combined with the Direct Access Radar Channel as backup, will achieve a service available of approximately .9999999, which is the AAS requirement for emergency operations.

3. *New Automated Functions.*—GAO has expressed concern that the new automated functions called Automated En Route Air Traffic Control (AFRA) have not yet veen validated. In response to GAO's concerns, he have initiated development of a simulation laboratory for AERA 2 in which tests will be conducted in parallel with AAS development. We will use real-time simulation involving air traffic controllers to verify the benefits of AFRA 2 before adding this capability to the AAS in the form of a software enhancement package.

4. *Interfaces.*—We have completed draft interface requirements documents for all but two of the interfacing systems and expect to have the documents in final form at the time we release the Request for Proposals for the acquisition phase. Two remaining interfaces for Mode S data link and the terminal Doppler weather radar will have to be specified later since design details have not yet been developed for these subsystems. We do not believe that this is a serious problem since the AAS, like the present system, must be able to accommodate new interfaces throughout its operational life.

I trust you will find this information responsive to your request.

Sincerely,

DONALD D. ENGEN, *Administrator.*

Senator FORD. Thank you very much. Your statement will be included in the record.

Next, Mr. McLure.

Mr. McLURE. Thank you. I will summarize briefly. With me are Dr. Carl Palmer and Charlie Cotton, who you might remember. They worked with specific systems in the NAS plan and can answer specific questions if you need the answers.

Our statement today focuses on the reasons for and the effects of delays in implementing the NAS plan's major systems. Simply put, the NAS plan is delayed because FAA assumed the technology it needed would be readily available off the shelf, but it was not. Since FAA did not expect to have to develop much new technology, it did not build in time to develop and test new systems before buying them, and now they are having to do more extensive development work than they expected.

The delays are having a variety of effects. For example, FAA expects to provide better air traffic control with fewer people because of NAS plan improvements, but the delays will make it difficult for FAA to provide a level of air traffic service needed in the meantime.

Secondly, the NAS plan is supposed to save the airline industry a lot of money by reducing delays and permitting more efficient routing, but these benefits are now being pushed further and further into the future.

And a third effect, that is a subject of this hearing, is that the aviation trust fund, which was set at a level which would have paid for the NAS plan if it had proceeded on schedule, now has a huge balance in it. As you well know, the existence of that balance has generated a variety of demands for its spending.

The NAS plan delays postponed almost $38 billion in user benefits. These include $24 billion in reduced airline schedule delays and almost $14 billion in fuel efficiencies that are expected to result from allowing users to operate the routes they choose.

Airlines and the traveling public are becoming increasingly dissatisfied with mounting schedule delays, that were up 24 percent in 1986 compared to 1985, and the airlines are pressing FAA to reduce its separation standard so that more aircraft can be in the air at the same time.

NAS plan technology will make that possible without compromising safety, but FAA has proposed to reduce the in-trail separation standard now even though the NAS plan technologies have been delayed.

Our work has shown that FAA is proposing to reduce its separation standards right where its shortage of experienced controllers is most acute, the en route centers that control the flights between airports. We recently testified before the Subcommittee on Government Activities and Transportation, the House Committee on Government Operations, that because of air traffic controller inexperience and staffing shortage in certain places, controller capacity should be considered along with airport capacity in determining the appropriate levels of traffic.

Our work today has also identified how NAS plan delays are affecting an issue of particular interest to this subcommittee, the unused balance. The trust fund has an unused balance primarily because fiscal year appropriations for the NAS plan have lagged almost $2 billion behind the amount authorized in the Airport and Airway Improvement Act of 1982.

Moreover, because of the penalty provision in that Act, the shortfall in NAS plan and airport improvement program appropriations through fiscal year 1987 will cause the share of FAA operations and maintenance appropriations financed by the trust fund to be $3.3 billion lower than authorized.

FAA, the Department of Transportation, and others have sometimes pointed to the appropriations shortfall as a reason for NAS plan delays. But our work and, as Marty pointed out this morning, our work really shows that the NAS plan major systems have not experienced shortages of funding to date. FAA simply has not been able to accomplish what they thought they were going to be able to accomplish back in 1981, and that is what the 1982 through 1987 authorizations were based on.

The Congress has an interesting dilemma as it deliberates reauthorizing the trust fund. FAA's own analysis of its 1983—that is 1983—NAS plan update, which it says is the appropriate baseline on which to measure progress, shows that the plan's major systems have slipped from six months to four years since the 1983 plan was published. Therefore, appropriations may continue to lag behind authorizations until such time as the baseline for authorizations reflects the more realistic implementation schedule.

We expect that Congress will face continued growth in the trust fund's already substantial unused balance unless changes are made in the authorizing legislation. Now, we have previously suggested some remedies to some parts of the current situation.

First, we suggested that the Congress require FAA to assure that systems work before appropriating further moneys for their production.

Second, we suggested that FAA should produce a revised NAS plan which includes realistic schedules of project implementation and integration that can be used as a basis for a multi-year authorization and annual appropriations which FAA can be held accountable for achieving.

Third, we suggested that FAA should more fully consider the increased demand for air traffic services on its air traffic control work force in the absence of advanced NAS plan technologies before it reduces existing separation and spacing standards.

We still think these suggestions are appropriate.

That concludes what I will say, and we will ask that the written statement be included in the record and then we will be happy to respond to your questions.

[The statement follows:]

Statement of Herbert R. McLure, Associate Director, Resources, Community and Economic Development Division, GAO

Mr. Chairman and Members of the Subcommittee: We appreciate this opportunity to appear before you today to discuss the status of the National Airspace System (NAS) plan to modernize, automate, and consolidate the existing air traffic control (ATC) system. As agreed, our statement will focus on the reasons for and the effects of delays in implementing the NAS plan's major systems.

The NAS plan is delayed because FAA assumed that much of the technology it needed would be readily available "off the shelf," but it wasn't. Since FAA didn't anticipate the need to have to develop much new technology, it didn't provide for time to develop and test new systems before buying them, and now FAA is having to do more extensive development work than they expected, in many cases, after it is already committed to a purchase.

The delays are having a variety of effects. For example, FAA expects to provide better air traffic control with fewer people because of NAS plan improvements, but the delays are making it difficult for FAA to provide the level of air traffic control needed in the meantime. Secondly, the NAS plan is supposed to save the airline industry considerable expense by reducing delays and permitting more efficient routing, but these benefits are now being pushed further and further into the future. And a third effect that is a subject of this hearing is that the aviation trust fund, which was set at a level which would have paid for the NAS plan if it had proceeded on schedule, now has a huge unused balance. The existence of this balance has generated a variety of demands for spending programs.

IMPORTANCE OF THE NAS PLAN

Even before deregulation of domestic airlines in 1978, FAA knew that air traffic would continue to rise through the turn of the century, placing unprecedented demands on the ATC system. It also knew that to meet this demand safely and efficiently would require improved and expanded services, additional facilities and equipment, improved work force productivity, and the orderly replacement of aging equipment. So in December 1981, FAA published the comprehensive NAS plan.

FAA plans to spend over $16 billion on the NAS plan by the year 2000, making the plan one of the largest civil procurements in the history of the federal government. To successfully accomplish this technologically complex overhaul of the existing system, FAA must effectively manage over 150 individual projects involving hundreds of contracts.

The Department of Transportation, which has the final acquisition authority for the plan, has designated 11 of the 150 projects as major systems because they either exceed $150 million or are critical components of the plan.[1] Together, these 11 systems will cost about $8 billion, or one-half the plan's total cost.

REASONS FOR NAS PLAN DELAYS

Over the past 5 years, all 11 major systems have experienced schedule delays ranging from 1 to 8 years.[2] (See att. I.) As the attached FAA analysis shows (see att. II), FAA understimated the complexity of these systems, the time needed to develop software, and the interdependency among the systems. Some technologies thought to be "off the shelf" required further development and testing to meet existing ATC operational requirements. For others, FAA had not defined its operational requirements well enough to permit development of adequate system specifications. In addition, we have found a few situations where FAA decided to develop its own systems rather than using commercial alternatives that were adequate to meet well-defined operational requirements.

To expedite the benefits it estimated would come from the NAS plan, FAA used a fast-track, concurrent development and acquisition strategy that did not include adequately demonstrating the systems' performance before committing to full-scale production. GAO has often shown that this type of approach leads to increased technical, operational, and economic risks. For example, we recently testified that the high degree of concurrency between development and production of the Air Force's B-1B bomber was a major contributor to the program's problems, and that where concurrency cannot be avoided it must be carefully managed. We concluded that technically challenging development programs that advance the state-of-the-art argue that testing and development should be reasonably complete before production is started.

FAA has recently undertaken measures to correct deficiencies in its acquisition process. In addition to issuing its first standard operating procedures to be followed in acquiring major systems, the agency has established test and evaluation policies and procedures. FAA is also rethinking its approach to acquiring individual systems.

These improvements are too late to benefit most of the 11 major NAS plan systems, but a few of the systems, including the critical Advanced Automation System (AAS) could still benefit. The same should be true for any other systems, such as the terminal Doppler weather radar, that FAA decides are major systems subject to the new policies and procedures.

The challenges that lie ahead for FAA are such that even with substantial management efforts, further delays may be unavoidable. Hardware and software will soon begin to be delivered to the field, and the NAS plan is approaching a critical phase where the challenge will be not only to install the systems but to integrate the more than 1,000 interfaces between and among the various projects. FAA must ensure that the radars, data processors, and data links come together at the same time to accomplish the NAS plan's stated goals and objectives.

Installation and integration is complicated by the large number of principal players. While FAA retains decision making authority, it shares accountability with Martin Marietta, the NAS plan's system engineering and integration contractor (SEIC). And, although FAA proposes to consolidate implementation engineering under the SEIC, hands-on hardware installation will be provided under a separate national technical support services contract (TSSC). FAA plans for the TSSC contractor to operate under the direction of FAA's nine regional offices. The regions will also be responsible for contracting competitively for individual construction efforts. We have work underway to evaluate the adequacy of FAA's installation and integration plans and will report to the Congress on this issue later this year.

EFFECTS OF NAS PLAN DELAYS ON ATC SYSTEM SAFETY AND EFFICIENCY

Our work over the last 3 years has identified several effects NAS plan delays can have on ATC system and efficiency.

For example, it will be several more years before FAA has as many experienced controllers as it says it needs to handle air traffic that has now reached record levels and is expected to continue to grow. FAA could do more with fewer controllers if their productivity were increased, which is a main goal of the NAS plan's

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[1] A twelfth major systems acquisition—the terminal Doppler weather radar—has recently been added, but its benefits and costs have not been included in the NAS plan estimates.

[2] *Aviation Acquisition: Improved Process Needs to be Followed* (GAO/RCED-87-8, March 26, 1987).

AAS. But the AAS has experienced schedule delays totalling 8 years and the system's first major labor-saving features are not now expected until the late 1990's, resulting in a corresponding delay in productivity gains. In addition, delays encountered in other NAS plan projects intended to increase FAA's airway facility technician productivity together with staffing shortages are making it difficult for FAA to maintain an adequate level of equipment and facility maintenance.

NAS plan delays have also postponed almost $38 billion in anticipated aviation user benefits. These include $24 billion in reduced airline schedule delays and almost $14 billion in fuel efficiencies that are expected to result from allowing users to operate with a minimum of artificial constraints along preferred routes.

The airlines and the traveling public are becoming increasingly dissatisfied with mounting schedule delays that were up 24 percent in 1986 compared to 1985, and the airlines are pressing FAA to reduce certain aircraft separation standards now. Advanced technologies in the NAS plan will permit FAA to better track aircraft, so it can reduce separation standards without compromising safety. Even though the technologies have been delayed, FAA has proposed to reduce the in-trail separation standard (the distance one aircraft follows another at the same altitude) to its pre-controller strike distance.

Our work has shown that FAA is proposing to reduce its separation standards where its shortage of experienced controllers is most acute—the en route centers which control flights between airports. We recently testified before the Subcommittee on Government Activities and Transportation, House Committee on Government Operations, that because of air traffic controller inexperience and staffing shortages, controller capacity must be given weight along with airport capacity in determining appropriate levels of air traffic.[3]

IMPACT OF NAS PLAN DELAYS ON CONGRESSIONAL DELIBERATION

Our work to date has also identified how NAS plan delays are affecting key aviation issues now before the Congress. One of particular interest to this Subcommittee is the current unused balance in the NAS plan's funding source—the airport and airway trust fund.

FAA estimates that the trust fund balance will reach $5.6 billion by the end of fiscal year 1987. We reported in May 1986 that the unused balance in the trust fund could increase to $12.4 billion by the end of fiscal year 1990 if (1) the trust fund and aviation taxes are reauthorized without change and (2) revenues and expenditures materialize as projected.[4] Unless reauthorized by the Congress, the trust fund expires at the end of 1987.

The trust fund has an unused balance primarily because fiscal year appropriations for the NAS plan have lagged almost $2 billion behind the amount authorized in the Airport and Airway Improvement Act of 1982 (Title V of Public Law 97-284). Moreover, because of a penalty provision in the 1982 authorization act, the shortfall between NAS plan and airport improvement program authorizations and appropriations through fiscal year 1987 will cause the share of FAA operations and maintenance appropriations financed from the trust fund to be $3.3 billion lower than authorized.[5]

FAA, the Department of Transportation, and others have pointed to the appropriation shortfall as a reason for NAS plan delays. Our work, however, shows that none of the NAS plan major systems has experienced a shortage of funding to date. FAA simply has not been able to accomplish as much as originally anticipated in the 1981 NAS plan on which the fiscal year 1982 through 1987 authorizations were based.

The Congress has an interesting dilemma as it deliberates reauthorizing the trust fund this year. FAA's own analysis of its 1983 NAS plan update, which it says is the appropriate baseline on which to measure progress, shows that the plan's major systems have slipped from 6 months to 4 years since the 1983 update was published. Therefore, appropriations may continue to lag behing authorizations. Until such time as the baseline for authorizations reflects realistic implementation schedules, we expect the Congress will face a continued growth in the trust fund's already substantial unused balance unless changes are made to the authorizing legislation.

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[3] *Aviation Safety in Airspace Controlled By Two Major FAA Facilities in the Chicago Area* (GAO/T-RCED-87-2, Feb. 27, 1978).

[4] *Aviation Funding: Options Available for Reducing the Aviation Trust Fund Balance* (GAO/RCED-86-124BR, May 21, 1986).

[5] Currently, the maximum allowable amount of trust funds that can be used to pay FAA's operations and maintenance costs is determined through the use of a formula specified in the 1982 Act. The formula was set up to provide an incentive to fully fund the authorized amounts for the airport and airway development programs. The closer the appropriations for these programs match the amount authorized, the greater the amount that can be used for operations and maintenance. As the difference between the amounts authorized and appropriated for airport and airway development programs increases, the application for the formula results in a lesser amount that can be used for operations and maintenance.

FAA's inability to deliver promised aviation user benefits on schedule along with the current and projected size of the trust fund balance has also resulted in pressure from aviation users for FAA to spend more. In addition, the fund balance has resulted in proposals to remove the trust fund from the unified federal budget and exempt it from the requirements of the Balanced Budget and Emergency Deficit Control Act of 1985.

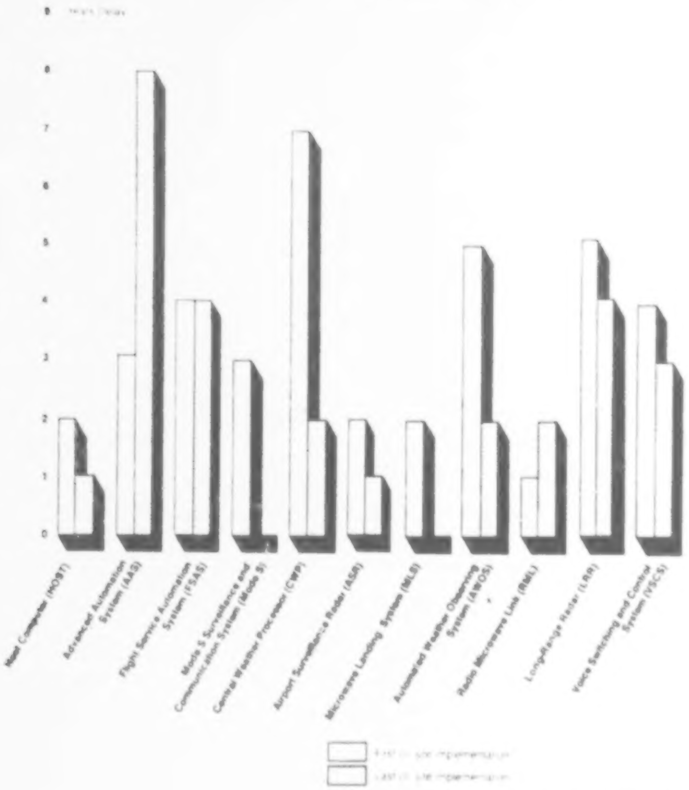
The Air Transport Association (ATA) estimates that scheduling delays, which the NAS plan is intended to reduce, are costing the airlines and their customers about $2 billion annually. These delays are one of the reasons for ATA's proposal to set up a federal corporation to oversee FAA's operational functions. The Reason Foundation has called for a private, nonprofit, user-oriented corportion responsible for ATC facilities, personnel, and equipment. And, the Aircraft Owners and Pilots Association has also recommended that FAA be removed from the oversight of the Department of Transportation and its functions be restored as an independent agency. All of these proposals would require changes to existing law.

WHAT SHOULD BE DONE

We have previously suggested remedies to the current situation. First, we suggested that the Congress require FAA to assure that systems work before appropriating further monies for their production. Second, we suggested that FAA should produce a revised NAS plan which includes realistic schedules of project implementation and integration that can be used as a basis for multi-year authorizations and annual appropriations and which FAA can be held accountable for achieving. Third, we suggested that FAA should more fully consider the increased demand for air traffic services on its controller work force in the absence of advanced NAS plan technologies before it reduces existing separation and spacing standards.

This concludes my testimony, Mr. Chairman. I will be happy to answer any questions you or other Subcommitte Members may have at this time.

Figure 1.1: Number of Years of Estimated Delays in Major NAS Plan Projects



Source: Comparison of December 1981 NAS plan and May 1986 NAS Program Master Schedule Baseline

ATTACHMENT II ATTACHMENT II

Status of Major NAS Plan Projects

MSA Project	Amount of Slippage in Initial Implementation Comparison 1983 NAS Plan with Draft 1987 Plan	Reason for Slip
HOST	6 Months	Contractor delays in software coding and documentation.
AAS	2 Years	Additional requirements added (color/AERA) and provision for pre-production testing.
VSCS	1 Year	Additional requirements (number of operational positions, redundancy) and testing to reduce risk.
FSAS	2 Years	Software development problems.
AWOS	2 Years	Contractor difficulty complying with Critical Design Review requirements and failure to perform required quality assurance procedures.
CWP	3 Years	Addition of prototype phase, redefinition of statement of work with contractor (NASA JPL), less than optimum contractor staffing.
Long Range Radar (ARSR-4/FPS-130)	4 Years	Delay in consummating FAA/USAF agreement on number of systems required and funding.
MODE-S	4 Years	Prototype added, clarification of specifications, revised test plan, contractor late meeting critical design review.
ASR-9	3 Years	Delay in completion of critical design review, problems in system integration testing, FAA rejection of inadequate test procedures, contractor problem obtaining critical parts.
MLS	2 Years	Delay in contractor software coding, changes of deployment location/runway, delay in receipt of valid frequency assignments.
RML	1 Year	Implementation started in 1986.
TDWR (New project in 1986 plan)	1 Year	Revision of draft project specification; evaluation of impact of various siting options

Source: March 5, 1987. Statement by FAA's Acting Deputy Associate Administrator for NAS Programs before the Subcommittee on Aviation, House Committee on Public Works and Transportation.

Senator **Ford**. Your statement will be included in the record.

Senator Kassebaum, since you may have to leave, would you like to proceed with some questions?

Senator **Kassebaum**. I have nothing at this time, Mr. Chairman.

Senator **Ford**. Marty, let me ask you this. We talk about funding and I think it is obvious that, from this request, that it is not a question of funding; it is a question of getting the system together.

At the same time your Department requested $1.5 billion from the authorizing committees plus the $200 million overrun allowance that you asked for, you were seeking only $1.35 billion from the Appropriations Committee. Now, why is there such a difference?

Mr. **Pozesky**. Mr. Chairman, it is my understanding that the authorizing proposal covers a two year period that we believe that we can keep in projecting what the funds we will need to keep the program on track.

We will need the $1.35 billion that we are requesting in 1988 for that objective, and we believe that our requirements in 1989 will also approximate the authorized requirements as well. So if I understand the sense of your question, I think that we have tried, we have looked at the schedules and we have requested the funds that we think are necessary to maintain the production lines that we have put together thus far.

And I know of no instances where funding limitations imply program delays in the 1988 or 1989 projections.

Senator **Ford**. The GAO estimates that final implementation of the advanced automation system, which is the cornerstone of the NAS plan, is already eight years—and I underscore, eight years—behind your initial schedule. Is this correct?

Mr. **Pozesky**. We believe there is no question it has been delayed. Our analysis says four to five years, Mr. Chairman. The key word is "final." We are working to get some early products into the field, apropos Senator Kassebaum's testimony.

We are working with the Appropriations Committees on both House and Senate to try to move the program along and strike a balance between technology risk and operational risk. And we hope to have the first implementation, if my memory serves me, in 1993.

So the last implementation has been delayed, but it is not totally characteristic of the whole problem.

Senator **Ford**. When will the final—and I underscore, final—stages of the AAS be operational?

Mr. **Pozesky**. Probably the end of this century, the late nineties for the last system to be installed as part of the AAS program. That is the last console in the entire air traffic control system.

Senator **Ford**. Do you think we will be here when that happens?

Mr. **Pozesky**. I hope so, Mr. Chairman.

Senator **Ford**. In fiscal 1981, the FAA committed to provide ILS navigation aid systems to 127 regional airports. However, to date only five, as I understand it, have been installed.

Why have the other 122 airports not received the ILS system, and does this reflect FAA's attitude toward the smaller airports?

Mr. **Pozesky**. Mr. Chairman, the FAA is trying to bring ILS on line as quickly as it can. Two years ago, two and a half years ago, the policy decision was made to minimize additional ILS installations, predicated on a belief that MLS would be on line.

Because of the MLS delays, the Secretary and the Administrator are considering policies which would allow the purchase of some additional ILS', and that policy hopefully will be finalized in the next week to two weeks. So that I think that the fundamental reason is we deferred ILS installations because of our belief that MLS would be on line and take up that gap.

Senator FORD. Well, your crystal ball did not work, did it?

Mr. POZESKY. No, sir, it did not.

Senator FORD. Senator Kassebaum.

Senator KASSEBAUM. Thank you, Mr. Chairman.

I think you made a very good point when you compared the technology risk and the operational risk, and I want to say I very much appreciate that, because I think it is of great concern to all of us. And I think for all of us it is difficult because we are not technical experts.

But it is of such great importance to the future of our airways system that it behooves us, I think, to struggle to try and, at this particular juncture, to really see if we can understand where we are.

I would like to ask you about the Host computer installation at Seattle. How do you analyze the operation of the program in Seattle at this point?

Mr. POZESKY. Good reports. We have had a long series of successful tests. It is a very laborious process. We put the computer in, we cut it over slowly, we begin to test the software. We tailor the software, we begin to run the computers side by side, the new computer side by side with the old computer.

Most recently, we had a couple of problems with unexpected software problems, and this was before the cutover, that cropped up but did not show up at the thorough testing that was done either in the contractor's plant or at our facility at the Tech Center.

So again, those problems did show up. Those were encountered at Seattle. We are working through them. We are optimistic of being able to commission by the end of May, which is our target for that program. So it will amount to probably a seven month on-site shakedown, after exhaustive tests at the factory by IBM, after exhaustive tests at our technical center facility in New Jersey.

Senator KASSEBAUM. But you do have some confidence at this point that the software problems have been resolved?

Mr. POZESKY. Yes, ma'am, we do.

I do not know if Mr. Owens can add anything to that. Yes, we do have that confidence.

Senator KASSEBAUM. With respect to the central weather processor contract that was awarded to the Jet Propulsion Lab, I understand that an approximately two year delay has occurred. I was told that one of the reasons for this delay has been described as changes in acquisition strategy, difficulty in clarifying the operational requirement, and technical difficulties.

Should this be attributed to any changes in FAA procedure or the Jet Propulsion Lab?

Mr. POZESKY. Senator, I think that probably neither. This weather processor program has been one of the casualties, if you will, of the fact that, when the NAS plan was launched we made a conscious decision that we were going to launch some of the programs before all the systems engineering had been done, all the interfaces were defined.

I really believe the central weather processor is a prime example of a program that got caught in that dichotomy, and that as we learn more about the systems integration and system interfaces we have had to continue to go back and change our direction and change our technical requirements for that program.

I think we now have it. We have them baselined. We have been working with JPL to get a high confidence cost and schedule on that program, and we believe we have now got a stable baseline to continue on that.

So I do not know if I have made it clear, but I really think that program has been a casualty of shifting requirements, which was traced to the fact that we launched some of these programs consciously before our systems engineering was done. The systems engineering finally caught up with it.

Senator KASSEBAUM. This is a long question, but, Mr. Chairman, I would like to read it because it in a way really does reflect a concern I have, and perhaps it shows some broader concerns about this whole effort.

The FAA and all of us have chosen to really move towards a highly automated approach to air traffic control in the future. I think all of us believe this is important. This approach includes, of course, the fact that the computers have to make decisions presently made by humans regarding air traffic control.

The GAO points out that the new system will have to meet unbelievably strenuous reliability standards. For example, GAO has said the requirement for availability to perform emergency mode functions will be 99.99999 percent, or something like that, 100 percent almost. That equates to no more than three seconds of down time a year. Full service must be maintained 99.995 percent of the time or less than 2.6 minutes of down time a year.

Knowing the history of the present system, how likely is it that we can achieve such perfection?

Mr. POZESKY. It is, we believe, essential on a system basis to achieve that perfection. Whether that can be achieved in a single computer or whether we are going to have to have a series of redundant systems I think will be the issue.

Our attempt is to try to achieve that in a single computer system, and that is the design requirement that the AAS program is working to. I think we have certain alternatives we can invoke if we need to. We can add independent systems that operate independently, so that even if one highly reliable system fails, a second system will kick in totally independent of the first. That is the strategy we use today.

Senator KASSEBAUM. Mr. McLure, do you have any comment on that?

Mr. McLURE. I would like to ask Dr. Palmer to say a few words.

Dr. PALMER. I think the two things to understand is whether the need for that reliability exists, because whether the need—the AAS fully automated state is achieveable at all is a real question mark in our minds. It is still on the drawing boards. It still has not been demonstrated to be technically feasible and operationally acceptable. And so those high reliability requirements are driven by the automated decisionmaking, as you pointed out.

Second, I do not think it is achievable with the system, and it is driving a fairly expensive solution to the problem. It is a central driver in the cost requirements of this system.

Senator KASSEBAUM. Will the Host computer now installed at Seattle provide us enough information so that we can begin to make some judgments about reliability of the whole system? is regard?

Dr. PALMER. It is not a good precursor for that type of reliability. It should provide fairly high degrees of reliability with hardware. The extent of reliability with the converted software which has been modified from the existing systems will have to be proved out over time. It almost never comes out instantaneously or even in the first few months.

But it is only—it is still on a central computer design where you have a number of terminals tied to a central computer, whereas the AAS designs are built on a local communications network and require a large number of computers to work in concert.

And there has been no previous real time system built with that architecture, so we do not have any real good forerunners.

We have been urging in our recommendations to the two Appropriations Committees—we have done a lot of work for them—that they do a lot of demonstration of the technical and operational feasibility of achieving these levels of confidence.

Mr. POZESKY. Senator, if I might add to the point, that I think it is important to state that in our mind the kind of reliability that we are talking about really is the ATC system reliability. And we do not see a strategy—we hope we will never encounter a strategy—where scopes would go blank and there would certainly not be any control; that there are systems that are tandemed onto each other, a highly automated system that has a high reliability, but if that were to fail there is a less automated system that is there as a backup, and finally a manual system that is there as a backup.

The challenge that I think we are going to have to overcome and deal with is as we get more automation into this system, make sure that our controllers and our work force are fluent with these backup capabilities and are capable.

We have literally seen the phenomenon in other areas where the equipment is so reliable that when it breaks some of our people are not as proficient at fixing it, because it just does not break very frequently. And so we have seen that phenomenon and we have to guard against that, both operationally and technically.

Senator KASSEBAUM. Thank you very much, Mr. Chairman.

I know I think this is such an important part of the whole issue, and I appreciate the answers. Thank you.

I have a couple questions I will submit for the record, if I may.

Senator FORD. And we will ask the witnesses to respond promptly.

Senator Exon.

Senator EXON. Mr. Chairman, thank you very much.

Gentlemen, this is a problem that has been coming at us like an avalanche for a long, long time. And I have been very much concerned about it, but I do not have the expertise on my own to know the answers.

I am going to keep pressing, though, for those of you whom we rely on to come up with the answers.

Mr. Pozesky, let me ask you this question. Is it fair to say that the FAA simply has not been able to get a handle on this program, to have much better control of our airspace, especially that airspace approaching the major terminals, such as O'Hare; that the FAA is about as frustrated as the rest of us are in looking at this problem?

Mr. POZESKY. Senator, the problem I think you are addressing is the National Airspace System delays, the NAS plan delays. And my answer to that would be that the FAA has gotten a handle on the problem. The earlier estimates, the earlier schedule estimates were optimistic, there is no question.

We constantly are faced with the problem of whether we should prematurely deploy systems or thoroughly test them. We always opt in the direction of safety, to thoroughly test them.

We have been surprised by the software, the delays that we have encountered with our industrial partners in fielding and developing the software. There is no question about that. We have fought our way through those delays.

I would like to at least make the observation that none of these programs have died. We have overcome these problems. We have overcome them in the flight service station area. We believe we have overcome them in the Host area.

We are working our way through these problems. So I think we have been frustrated over the delays we have encountered and disappointed that our schedules turned out to be optimistic. But we are making the right kinds of safety decisions.

We, jointly with our support for Martin Marietta and other organizations have battled our way through these programs, I believe we are getting there.

Senator EXON. Mr. Pozesky, I am sure that you are familiar with a gentleman by the name of Pope, Jim Pope.

Mr. POZESKY. Yes, sir, I am.

Senator EXON. Mr. Jim Pope was one of the early whistleblowers with regard to the avalanche that I spoke of earlier. Mr. Pope is a man that has been known to me as an aviation expert for a long, long time. I do not mean to say that he is always all right and everyone else is all wrong.

He blew the whistle years ago—and I do not know how many years ago it was—on the midair collision avoidance system that the FAA had dismissed out of hand as not practical or affordable.

But ever since that time—and I can remember four and five years ago sitting at this table and hearing about the same thing from FAA that I am hearing this morning.

Now, I do not say that in criticism. I say that only as a historical perspective on how serious this problem is. And it seems to me, we basically are getting nowhere fast. I remember three or four years ago when the FAA said that they were going to have air traffic control system, and it was going to be the best in the world.

It has not come to pass. From the testimony that I hear this morning, it has not come to pass yet.

I want to ask you a question, Mr. McLure. Are you, as one who has looked into this with some expertise and knowledge and as much concerned as this Senator is about the safety of our airspace, how would you rate the condition as you view it today? Serious, difficult, impossible, okay? Give me some matter of criteria as to how do you feel when you get in an airplane today and fly to Chicago? Are you as secure as you were eight years ago when you made such a flight?

Mr. McLURE. As you know, that is a real difficult question to answer.

Senator FORD. How do you feel when you get in an airplane? If you do not feel too good, that is not hard.

Senator EXON. That is not a very difficult question. Do you feel as secure when you get in an airplane today as you did eight years ago when you fly to Chicago from Washington, D.C.?

Mr. McLURE. I feel secure. I do not really remember how secure I felt eight years ago. But I think flying is one of the safer things we do in our society. Certainly, flying on a commercial airline is quite a safe thing to do.

On the other hand, I mean, there are a lot of questions connected with that. One of them is, is it as safe as it can be, and I do not think, and I do not think FAA would say, it is either.

Is it as safe as it should be? Well, that is a different kind of a question. But I do think the system is safe.

We also, based upon our work, would say that the system can be safer. Now, to make the system safer, though, you have to make some choices that may be fairly unpleasant. One of those choices may be that people will have to be delayed, and that is one of the things.

Senator EXON. They are being delayed. There is no question about that. That is one established fact that no one can argue with. People are being delayed, like they have never been delayed before. I mean, there is no argument there pro or con.

Mr. McLURE. I think FAA can legitimately say from its side that one of the reasons for those delays is that they are insisting on safety standards and they are unwilling to compromise some of those standards just in order to speed along flights.

On the other hand, we of course are very interested in having them uphold that point of view and have real good reasons when they change it. FAA and the Congress and probably everybody made—were overly optimistic in 1980 when they thought they could change the system very rapidly. They cannot.

Now the real question is what to do about it now. I think there are some things that they can do maybe a little better than they are doing. One of those things is that there are parts of the NAS plan that are needed right away in order to do what we are doing presently better. There are other parts of the NAS plan that are designed to do something else, that they are really designed to change the system into a better system some time in the future.

I think FAA ought to concentrate real hard on the things that need to be done to make the present system better, because the present system is what we have got and what we have to live with. And quite frankly, the stuff out there is getting old. It is very unreliable. FAA knows that and I think that they are quite aware of what I am saying.

I think another thing has happened to FAA, and that is they have kind of locked into the plan that they had back in 1981. Some parts of that plan, I think there are real questions about whether the things that were proposed are still needed.

And some day we will have a lot of specifics to give you on the MLS, for example. Nevertheless, FAA is making a lot of decisions as though everything in that plan is as important now as they thought it was going to be in 1981, and we think maybe they should take another look at that.

So we have been encouraging you and some of the other committees to get FAA to re-examine that plan very carefully and give you some targets, realistic targets that they really can meet, and that you can authorize money for them to meet.

Senator EXON. Mr. McLure, I am telling you, and I am telling you, Mr. Pozesky, that Jim Pope said way back in 1981 that this plan would not work. But the bureaucracy of the FAA is as immoveable as any other bureaucracy that we have in the Federal government.

And this is one Senator that is going to be on your back until you get moving.

I am sick and tired, Mr. Chairman, of sitting here at this table, as I have for years, and I feel that I am not discharging my duties. It is wonderful for you people to sit here and say you do not know, you may feel just about as secure. If you do feel as secure today as you did eight years ago, you do not share the concerns of this frequent air traveler.

Let me ask you this question. Has not the wonders of deregulation and the increased numbers of flights contributed seriously to the problem that we are discussing here this morning? Do you think that is true, Mr. Pozesky?

Mr. POZESKY. Senator, I really just do not know.

Senator EXON. Well, nobody knows anything. Nobody knows whether it is safe to fly.

What do you think, Mr. McLure?

Mr. MCLURE. Deregulation changed the way the airlines operate, and that affects the air traffic control system. And so we would say, yes, absolutely deregulation has affected the FAA, the things FAA has to do to maintain system safety.

The obvious example is hubbing. More airplanes are trying to go to the same airports at the same time.

Senator EXON. That is pretty obvious, and I thank you for your forthrightness. I mean, I think that is as simple as ABC. We have got more airplanes in the air. We have not, if any, significantly improved our guidance and warning systems. We have got less experienced controllers, by and large, handling increased numbers of traffic, with the same old equipment.

Now, let me ask, what is the solution to this? Have you, Mr. Pozesky, ever considered—and I congratulate the FAA, in my criticism of them, for keeping planes on the ground. You know, I, like most other travelers—I do not think I have been picked on.

I am just like anybody else. I feel a whole lot more secure sitting on that runway at National Airport waiting to go to Chicago than I do having that airplane take off and slow down en route and circle around Chicago in a belching pattern. I think that is a step in the right direction. So as much as all of us dislike these delays, I think that makes me feel better, because I feel that somebody is in charge.

Now, in that regard, to follow up that line of thought, would you recommend in your oversight position, Mr. McLure, that if we are really serious about this, that we should consider cutting the number of flights into congested airports by 10, 15 percent, 25 percent if we have to, until we get a system that you are both convinced and all of us are reasonably convinced is safer than the one we have now?

Is the FAA continuing a system that you are not satisfied with, simply because of the economic pressure brought to bear by the airlines, who want to fly more and more people, and basically say that the safety is up to you and not the airline?

Have you ever considered—do you have a plan, if you cannot get something worked out in the near future, to say that you are going to limit and reduce the number of flights going into O'Hare and other major terminals?

Mr. POZESKY. Let me try to comment on that, Senator. First, the systems we have in place today are improved and different from the systems we had in place previously. We have automation aids operating for the controller that help the controller identify and keep traffic separation at the primary standards.

We are flight testing and we have just begun operational use in Piedmont aircraft of the first totally independent airborne collision alerting, collision avoidance system. The Administrator has announced his intent to require that system be carried on all aircraft.

As part of the NAS plan programs, we have put in place a system which we call traffic management system, operating in the country where we feed traffic to 22—we meter traffic, to the 22 pacing airports. The purpose of that system is to control and to stabilize the flow of traffic into airports so that many things do not happen, so that not only does the traffic system become overloaded and safety compromised, that does not happen, but also that the fuel is not burned, by holding in the sky.

That is a system which we call traffic management system, part of the NAS plan, which is very much a day to day element in our activity of metering and controlling the air traffic control operations throughout the country.

So I do want to say that there are lots of things that are done today that deal with this problem that were not in place four or five years ago.

Let me ask Mr. Owens if he wants to supplement that.

Mr. OWENS. The FAA does have an operating plan to work at accommodating the increasing traffic, and that includes airspace adjustments such as were made in New York recently in February, that increased the arrival and departure routes out of New York and in fact have reduced delays something like 25 to 30 percent in the New York area.

The flow control procedures that are in use in fact do work at controlling those peak periods of time at the major airports where scheduling has created a capacity problem. When you mentioned about restricting flights into airports, I would caution that as an overall approach, because in any given hour at Chicago O'Hare or Atlanta or LaGuardia you will find there are many hours in the 24 hour period that in fact you can accommodate additional aircraft.

But it is that peaking that we are trying to smooth out right now. The method that we use is the flow control method, and that is why you sit on the ground many times at National or wherever, coming to a busy terminal, to smooth out that peaking that the scheduling creates.

Senator EXON. Well, gentlemen, I guess my time is up. Mr. Chairman, you know, I am continually frustrated. I ask witness what I think one legitimate questions, and I do not think I am getting direct answers.

When I said, have you considered eliminating the number of flights into O'Hare, I thought that nominal intellect would have indicated that I did not think you should limit flights into O'Hare at 3:00 and 4:00 o'clock in the morning. What I was talking about was the peak periods.

Let me be more explicit. Do you have a plan or are you considering a plan to reduce the number of flights that you are presently allowing to be scheduled into O'Hare during peak periods, when we have the untimely and unnecessary delays that is being experienced today? Or are you simply saying to try and accommodate everybody we are going to continue with our present program to delay flights on the ground when we run into difficulty?

Mr. OWENS. That is an option. It is not in active consideration at this point in time. Chicago O'Hare is a controlled airport, by the way, and under Federal air regulations we do control the number of flights per hour into Chicago O'Hare.

Senator EXON. Do you think, you should give some consideration at least to the fact that you are allowing too many flights into O'Hare at certain peak times during the day?

Mr. OWENS. As a consideration, yes, sir, we do look at it in that view.

Senator EXON. Thank you, gentlemen.

Thank you, Mr. Chairman.

Senator FORD. Mr. McLure, you and your people have done an excellent job in this area and I want to compliment you for it. We are not picking your brain as well as we should this morning, I am afraid. But with all of your studies that you made as it relates to the NAS plan, does GAO have any suggestions for how this committee can assure that the NAS plan proceeds as close to schedule as possible?

Mr. MCLURE. Well, I think to sum up what I tried to say earlier, we think that FAA really needs to give you a plan with deadlines that they can say to you, yes, we really are going to be able to achieve these deadlines in this order, this sequence; we need these things right away, we can wait longer on these things, we can do more of the careful development before we commit ourselves to purchases on these other things.

You need to get that from them so that you can in return say, okay, we want this new system and we will pay for it, and we will pay for it in the right order. As it stands now, I think we are all working—and I do not think Marty wants to be held to the 1983 projections. I know he does not want to be held to the 1981 ones.

I think we are all kind of working in the dark in that sense. And it would be a great help if we could zero in on some things that we all believe FAA can achieve.

Senator FORD. The way I see it, the NAS plan will be 20 years old before some of its major components are operational. Does this mean that the new system will be obsolete as soon as it is installed?

Mr. MCLURE. I do not know. I would like Carl to address that a little bit, because he knows more about the advanced automation system.

Dr. PALMER. Some of the technology will be dated. It is tied to the seventies and eighties technology that is available.

And we urged last September that a relook at the types of technologies and the rationale for putting those into place be looked at again critically, and not sit on a fixed plan, if you will, of the design from 1981. In specific, we asked that they take a much harder look at the use of satellites for communication, navigation, and surveillance uses, because they offer some distinct advantages if they work.

And we think that research and development on those areas and working that into the plan is absolutely essential.

Senator FORD. Should the FAA then be actively considering alternatives to the NAS plan, even while they are trying to carry it out?

Dr. PALMER. I would characterize that as alternatives within the NAS plan. It is not a question of turning off the NAS plan and picking up something else, but rather how can we best use the available technologies that we have to work out the problems that we foresee for air traffic control.

Senator FORD. You express your feelings by the look on your face, and when we were talking about the installation of equipment in Washington and some of the things that were coming out, do you have a different opinion of how that is falling into place and how the software and hardware is working?

Do you think that the FAA will be able to meet their deadline?

Dr. PALMER. We do have some reservations about what is going on at Seattle. We do not have any active work. We just went in for a quick look-see to see because we had heard about some problems.

As of the end of March, there were 35 type one problems with the software there, and type one problems are considered to be show-stoppers, critical functions that will not work. IBM and FAA are working on solutions to those, but I would have to be somewhat less than candid if I did not say there is a distinct possibility of further delay in getting that system operational.

Senator FORD. Do you think seven months is optimistic?

Dr. PALMER. Well, right now it is two months. They hope to have it operational by the end of May, and they have still got a large number of type one problems. And we were not able to obtain a count of what are considered serious problems, type two problems.

So there is still a large number, and they have one problem which they think they have worked out a solution to in the communications mechanism that tends to shut down the computers.

Just literally, when they turn on the switch it shuts down the other machine.

Senator FORD. If the Host computer will solve reliability problems with the current system and provide for better information for air traffic controllers, why do we have a crash program on the AAS?

Dr. PALMER. We have argued several times over the past two years, with as much vehemence as we could muster, that there did not need to be the hurried approach, the accelerated approach, to the AAS acquisition. We believe there is time to do it right, and therefore we have urged a much more considered and staged approach to development and testing of that system before the large procurement commitments are made and the designs are finalized in production models.

Senator FORD. Carl, do you have a schedule which would be orderly and as far as development and testing before the FAA proceeds to the procurement of the AAS?

Dr. PALMER. The approach that we have been discussing in the past two months with FAA and with the Appropriations Committees would argue for restart of the design work on the AAS itself. Right now the design work, the final design work on the AAS, is being held in abeyance until the contractors are selected some time next year, and we think that that is 18 months that could be used in design work, that would allow them more space for development and testing.

The final impact on operational readiness dates would be very positive. Unless you use that slack time for better testing and integration of the system before it went operational—to put it simply, the dates they have now could be better met if they started the design work now.

They indicate problems with both doing that in terms of managing and getting an effective design with two contractors working in a competitive environment and money problems, in the sense of it would cost more to have two contractors work on the design for the next year and few months.

Senator FORD. Am I correct that the FAA has what we would refer to as a construction management team, and that team is responsible for getting all of these components together or trying to organize and coordinate the design and so forth?

Is that the procedure that is being used?

Dr. PALMER. Yes, sir. They have a program office that has a team supplemented by the Martin Marietta systems engineering integration contractor from FAA site.

Senator FORD. Is that a proper procedure in the mind of GAO.

Dr. PALMER. Yes, sir.

Senator FORD. You are saying, then, that the better use of the time, however, could be used as it relates to the design factor?

Dr. PALMER. It is recommitting to the original schedule of finalizing the preliminary designs for the AAS portion of the system. That includes the solutions to the terminal and the en route automation functions. These are the new software functions that were referred to earlier, as opposed to the interim initial sector sweep system, which would work with the Host and the old software.

Senator FORD. Did you have any more questions?

Senator EXON. Mr. Chairman, thank you. I have a quick question or two that I would like to ask Mr. Cotton and Dr. Palmer. And I asked it in one form or another of the other witnesses.

From your considerable area of expertise, gentlemen, do you feel as secure flying into major airports today as you did a few years ago?

Dr. PALMER. I personally do not.

Senator EXON. You what?

Dr. PALMER. I personally do not.

Senator EXON. You personally do not.

Mr. Cotton?

Mr. COTTON. When we fly to Chicago, we fly into Midway, first of all. But——

Senator EXON. You fly to where?

Mr. COTTON. To Midway, instead of O'Hare.

But based upon—and I think going back to the testimony we gave in front of Cardiss Collins a few weeks ago, when we pointed to the problems in the number and experience of the controlers at O'Hare and at the Chicago center, with the problems that they are having in bringing on the new technologies, those coupled together leads to a sense that, from my own point, that it is not as safe now as it was before.

Senator EXON. Thank you, gentlemen. I appreciate your answers, directly and forthright. I am with you.

Thank you very much, Mr. Chairman.

Senator FORD. Gentlemen, we thank you. We probably, at least this Senator, will probably be back to all of you, particularly GAO. I need some additional advice and counsel here to help me with my decision as it relates to where the subcommittee is going to go with respect to the NAS plan and its effect on safety.

I do appreciate all of you coming this morning. It is a tough job. Our job, as I see it, is moved somewhat by our emotional experiences, about losing the dog and three or four of the kids in flight, and that sort of thing. It gets to be very difficult.

And if a U.S. Senator and a Congressman runs into those sort of difficulties, it is everywhere. And so it is a little bit frustrating.

So I do thank you and look forward to working with you. Mr. McLure, I compliment you for your answer as it related to where you were safer today than you were eight years ago. I thought you handled both sides very well.

Thank you all very much.

[The following information was subsequently received for the record:]

THE DEPUTY SECRETARY OF TRANSPORTATION
WASHINGTON, D.C. 20590

April 15, 1987

The Honorable Wendell H. Ford
Chairman, Subcommittee on Aviation
Committee on Commerce, Science, and
Transportation
United States Senate
Washington, D.C. 20510

Dear Mr. Chairman:

On April 8, 1987, the Subcommittee on Aviation held a hearing on the National Airspace System Plan. Based on an article in The Journal of Commerce on April 9, 1987, and on reports from Department of Transportation employees who were present, I understand that Dr. Carl Palmer of the General Accounting Office was asked during the hearing whether he agreed with the Federal Aviation Administration's (FAA) assessment that the Host computer installation at the Seattle Air Route Traffic Control Center is proceeding well. In particular, he was asked if he expected the FAA to overcome technical problems discovered in Seattle that had not been identified during earlier testing at FAA's Technical Center in New Jersey. At issue is the FAA's ability to meet its schedule to commission the Host in late May.

Dr. Palmer replied that he believed the schedule to be overly optimistic. He further stated that there were 35 Type I problems in the software at Seattle which were "show stoppers," i.e., the problems were so significant that they could potentially disrupt the successful operation of the entire system. The clear implication seemed to be that there are major problems with the installation.

We believe that this assessment is unduly pessimistic and incorrectly portrays the status of the project. The FAA's April 6, 1987, report from Seattle indicated that there were 29 technical problems associated with the Host of which only 6 were serious enough to be classified as Type I. The report went on to point out that solutions to all of the Type I problems, and to 10 of the others, had already been developed at the FAA Technical Center. Although not discussed in the report, you should also know that the FAA and the support contractor for this project, IBM, believe that solutions to the remaining problems, which are not unexpected in a project of this magnitude, are imminent. Current plans are to deliver all software fixes to Seattle on April 21, 1987, for installation and full testing. Based on FAA's experience to date, commissioning within the timeframe scheduled does not appear to be in jeopardy.

Finally, we understand that GAO plans to reassess the status of the Host implementation and may contact the committee separately. I hope this information helps clarify the status of the Host installation project.

Sincerely,

Jim Burnley

Jim Burnley

QUESTION OF SENATOR WILSON AND THE ANSWER OF MR. MCLURE

Question. You replied to an earlier question that there are short-term projects within the NAS Plan that the FAA could complete in the near future which would make our current air traffic control system more safe. Could you please provide me with a list of those projects?

Answer. There are several NAS projects which FAA's systems engineering and integration contractor (SEIC) say will reduce previous aircraft accident rates reflected in NTSB data. Three projects—next generation radars (NEXRAD), automated weather observing systems (AWOS), and terminal doppler weather radar (TDWR)—will produce information pilots can use to avoid 89 percent of the total accidents that are potentially avoidable as a result of NAS projects. Together, they account for about $4.3 billion of the $4.8 billion the SEIC has identified as the total NAS project-related safety benefit. About half of these safety benefits are scheduled to begin occurring between 1989 and 1993 as a result of NEXRAD and AWOS implementation, but they will continue accuring throughout the life cycle of these projects until well into the next century.

We believe steps could be taken to hasten and better assure the realization of these safety benefits for each of these three projects. AWOS deployment should be accellerated at unstaffed airports now. Terminal NEXRAD should be more closely monitored. And TDWR technologies should be more fully developed.

One of these systems, AWOS, could and should be accomplished sooner than scheduled. The system is potentially more effective saving lives and avoiding accidents than TDWR, can be accomplished for about one-third of TDWR's cost, and is potentially available now rather than the mid 1990s. Despite the facts, FAA has not resolved the conflicting agency requirements impeding the immediate realization of AWOS safety benefits.

FAA could realize AWOS benefits now be recognizing two different standards for weather observations at staffed and unstaffed airport locations. Two years ago GAO supported deploying AWOS at unstaffed airports in order to enhance aviation safety. In the same report, however, we pointed out that the system's performance did not meet FAA's operational requirements for weather observations at staffed airports and said it would have to be augmented by weather observers to avoid degrading safety at these locations. FAA, however, has not begun deploying systems where they would improve weather information presently available, but has held up installation until it could develop a system that can be used at airports to replace existing weather observers without regarding safety. This effort to find a final, technological solution has not been successful. FAA has spent 2 years trying to develop sensors to measure cloud height and visibility sufficiently to meet its operational requirements. In the meantime, its AWOS contract for developing systems to be used at unstaffed airports has been canceled. Four vendors can now meet the AWOS system specification of measuring cloud height at unstaffed airports, but none meet FAA's operational requirement for staffed airports.

Rapid deployment of AWOS could avoid more aviation accidents and fatalities than any other NAS system except NEXRAD. We believe FAA should begin deploying this system at unstaffed airports as soon expedited contracting procedures allow.

In order to hasten the realization of safety benefits, it is important that further schedule delays for NEXRAD be minimized. NEXRAD is potentially the most effective safety program in the NAS plan. It generates more than half of the potential safety benefit. Despite being an en route system, it will actually provide wind shear protection at a significant number of airports. According to FAA, the NEXRAD project has recently been delayed 6 months because neither contractor could pass operational testing and evaluation requirements of the program office. As a result, potentially avoidable casualties that would not have occurred with NEXRAD now may, because of this delay. While safety benefits have been merely postponed, lives may be lost if this schedule slip is not recovered. We believe the progress of this program should be more closely monitored by the Congress and every effort made to hasten successful development through increased research and other measures to expedite the program.

There is little safety to be gained from hastening TDWR development, however, because its potential performance may be severely degraded in the process. In many ways, the project depends on NEXRAD technologies and is not as far along in development. The technical and schedule risk associated with TDWR give it a less than even chance of being completed within FAA's presently estimated time and cost. The SEIC estimates about 10 more months and $40 million more than FAA estimates could be necessary to give these TDWR estimates a 50-50 chance of success. FAA's efforts to expedite the realization of safety benefits associated with this system may, in fact, frustrate the development of technologies necessary to fully realize TDWR's objectives by simply not allowing sufficient time for research and development. Because it offers significantly fewer potential safety benefits than the other two systems, we believe FAA can afford to take the time to maximize this project's full technological potential for achieving safety benefits rather than risking their achievement with an expedited program.

Senator **Ford**. Our next panel of witnesses will be: John Baker, President, Aircraft Owners and Pilots Association, from Frederick, Maryland; and Edward Stimpson, President, General Aviation Manufacturers Association, from here in Washington. Gentlemen, if you will come up we will proceed.

And let us have Mark Schneider come up also. He is Executive Vice President, Professional Airway Systems Specialists.

There are lots of things going on on the floor and they were asking me to be over there yesterday, and it is a little tough.

So John, would you start. We will go to Mr. Stimpson, then to Mr. Schneider.

STATEMENTS OF JOHN SHEEHAN, SENIOR VICE PRESIDENT, AIRCRAFT OWNERS AND PILOTS ASSOCIATION; EDWARD STIMPSON, PRESIDENT, GENERAL AVIATION MANUFACTURERS ASSOCIATION; AND MARK SCHNEIDER, EXECUTIVE VICE PRESIDENT, PROFESSIONAL AIRWAY SYSTEMS SPECIALISTS

Mr. **Sheehan**. Good morning, Senator.

And actually I am not John Baker, not an impostor. He has been unavoidably detained. My name is John Sheehan and I am a Senior Vice President for AOPA.

As you may know, AOPA has been one of the most significant critics of the FAA's performance in the National Airspace System Plan since its inception. Facts that say that the plan slipping as much as eight years and program costs growing more than 50 percent, and even entire portions of the plan being abandoned or indefinitely deferred, are difficult pills for us to swallow.

High payoff items such as the automated flight service station system, AAS, NEXRAD, programs like that just are not getting there. The promise of the NAS system has not been fully met.

And we are very concerned about this, because we are the people that, number one, have to fund the system to pay for this. But even more than this, there is a hidden cost that you may not realize.

We have to re-equip our aircraft to the tune of somewhere between $3 and $6 billion, depending upon who you listen to, to come up with systems that will play with these wonderful new systems. So we have a double interest in making sure that it is going to work.

I have to echo what GAO has said. For the fourth year in a row now, we have said it is time to step back and take a long look at what we are doing with the entire NAS plan, especially with AAS. And I will get into that a little bit later. But overall, I think it is time that we took a very critical view of this program.

The advanced automation system is now something that the administration is dedicated to, but they are stuck between a rock and a hard place. They are not getting there from here. Their contractors are not making it work and we are getting to the point where we have what I call an ever-receding horizon.

It is like a bad dream, where you keep running, but you cannot get there from here. Everything keeps moving away from you.

We feel that the Host computer is the answer to the advanced automation system. Although there have been some initial delays and problems with the Host computer, it is probably one of the few items that the FAA can point to with some degree of pride and say, we have got something to work.

The key here is that the Host computer will buy us the capacity needs that we require on into the mid-1990's, so we can re-evaluate the AAS concept and see if we can integrate it with the satellite systems.

We have also been constant complainers about the MLS system. It is a system that has not met any of its promises so far. Its production plans are now two years behind, and it looks like it is going to grow to more than that.

The sad thing here is that we have hundreds of communities out there that need precision approaches and they are not going to get it with MLS any time soon. Even more than that, the benefits just are not there that were initially proposed for it.

The TCAS system that is supposed to give us collision avoidance, especially in the terminal areas, has now some 20 years of effort behind it and more than $50 million, and we are still not there. And we have started an operational test with an airliner, but what happens during an operational test anybody knows. We think that extra emphasis is needed here.

I guess our biggest single item that we are disturbed with is the lack of progress with the automated flight service station systems. This is something that was to bring us out of the dark ages with regard to data and briefing materials for pilots, critically needed weather and flight safety information, that just has not gotten there.

We have actually abandoned the eventual system, the Model 2 system, because they could not get it to play more than three years ago. And because they have abandoned that, we cannot progress any further on the current Model 1 system, because the FAA did not buy enough computers and software if they were not to install the Model 2 system.

So now the FAA is attempting to close the remaining 260 manual stations that are out there and open the automated stations without the automation, which we think is a pretty good trick. Obviously, they are not going to get there from here and we are going to be the losers because of this. We think the FAA has got to be realistic and give us the automation that we need on this so that we can have a safe briefing system.

Systems capacity is a big item. There have been many projects in the systems capacity area that have not been fulfilled. Improved long range and terminal radars, upgraded radar computers, and the Mode S system that is supposed to give us better definition so we can get airplanes closer together, are not getting there from here.

This should be the first priority of NAS, to increase capacity to answer the needs that you all have been articulating all morning about the system not being able to handle it.

The systems integration contractor, Martin Marietta, has had a back seat role up to this point. FAA is taking steps to make it more of a partner that it should have been from the very beginning. But we think that Congress should look very closely at this. We think the key to making the NAS plan work is to get that outside help and to consider that contractor an equal partner.

Finally, I would just like to say something we have been saying for the last four years, and that is there has to be a new sense of urgency and dedication to this plan. Also, I would like to add that we are concerned with what we have been hearing coming out of the Budget Committee concerning funding levels to freeze the transportation funds at 1987 levels.

This would be unacceptable and it would throw the NAS plan further behind.

Thank you, sir.

[The statement follows:]

STATEMENT OF JOHN L. BAKER, PRESIDENT
AIRCRAFT OWNERS AND PILOTS ASSOCIATION

Mr. Chairman, I am John L. Baker, President of the Aircraft Owners and Pilots Association (AOPA). We represent the interests of 260,000 general aviation aircraft owners and pilots who fly the majority of all business and personal hours flown in the United States. Our members are the chief beneficiaries of system safety and capacity improvements. For every airliner that takes off, 50 general aviation departures occur. For every airport served by an airline, general aviation serves 24. Clearly, our interest in airspace and airway modernization is a continuing one.

AOPA has been the most severe critic of the National Airspace System Plan (NASP) since its inception. We felt that the plan was a loosely connected group of largely unrelated projects that would not lend themselves to the systems approach. We felt that many of the programs were overly ambitious due to the requirement for as yet uninvented technology and the great complexity involved. Finally, we felt that the Plan was so extensive that changing requirements and technology would overtake many of the programs involved.

As we have seen the Plan evolve, many of our fears have been realized. Major portions of the NASP have slipped by as much as seven years; total program costs have grown by 50%; and portions of the Plan have been abandoned or indefinitely deferred. While some elements have progressed as planned, these have largely used existing technology and have not required integration with other programs. The high-payoff items such as the Advanced Automation System (AAS), Automated Flight Service Stations (AFSS), and Next Generation Weather Radar (NEXRAD) have fallen far short of schedule and promised benefits.

We have repeatedly appeared before this committee and others within the Congress to chronicle the deficiencies of the NASP. In rebuttal, the FAA has always provided eminently plausible reasons for planning and programming delays, coupled with assurances for rapid return to schedule. Their reasons and assurances have lulled all of us into a false sense of security, a promise of solutions just around the corner.

Now that we are five years into the Plan and eagerly awaiting deliverables, we see the time for completion being pushed farther and farther into the future. The rapidly expanding demands placed on the aviation system are being held hostage by an Administration unable to adequately manage essential program development. As we move into the next decade, new demands and technologies will far outstrip the flagging and ponderous NASP, leaving the users an increasingly unresponsive system.

We want to ensure that what we receive for our trust fund dollars is a system that will improve safety and our utility within it. To use the system NASP will create, each individual user will be forced to re-equip with a new transponder, precision approach receiver, upgraded altimeters, enroute navigation systems and in some cases, data link equipment. The fleet costs for this equipment will range from $3-6 billion. Therefore, we want to be quite sure we are getting what we want and need.

Now is the time to re-evaluate all elements of the NASP to ensure they are still required and properly fit into the overall plan. More importantly, the DOT and FAA must develop a new sense of urgency with regard to managing and developing the Plan. Recent management changes promise some improvement, but all concerned with the Plan must take a more aggressive and enlightened approach if we are to realize its promised benefits.

The General Accounting Office ahs just released a report, Aviation Acquisition, Improved Process Needs to Be Followed (RCED-87-8), critical of the FAA's NAS plan acquisition process and stateing that all 11 major NAS system projects have experienced cost increases and/or schedule delays. The GAO recommends that FAA subject major system prolject to operational testing before production decisions are made. In addition, new NAS projects should be included in the improved acquisition and management process to ensure that these projects are are sufficiently developed and documented to justify actual system acquisition.

GAO aalso found that "costs and schedule estimates were unreliable, justifications required major revisions, and required project documentation was missing or inadequate. In addition, at least two of the projects have experienced problems in meeting FAA's operational requirements. While improvement to the FAA's major acquisition process have been made too late to be of benefit to most of the 11 major NAS plan projects, some of the projects, incluidng the critical AAS project, can still benefit from these improvements."

Advanced Automation System (AAS)

This system is the centerpiece of the NASP, the highest payoff item of the Plan. But, the final implementation has slipped from 1994 to 1999, and costs have begun to rise significantly. We are quite concerned that the Administration's dedication to this significantly delayed and troubled program will deny users technological advantages that may be available in the near future.

We are pleased that the Congress recognized many of these shortcomings and placed constraints on further FAA development and procurement initiatives as a part of the 1987 appropriations process.

Further, the validity of the cost/benefit study which the FAA uses to justify the AAS appears slightly questionable. The FAA's phased implementation of AAS, benefits taken "up-front," and various assumptions in the cost/benefit analysis lead to the conclusion that many prospective benefits will not materialize.

We also understand that recently the FAA submitted to DOT a plan to restructure the AAS program to reduce the technical and management risks. GAO is now analyzing that proposed plan which requires some operational testing prior to system production, but Congress will have to determine whether this modification will answer the basic development problems.

In a related issue, the initial Host computer (which allow a transition to AAS) installation at the Seattle Center has taken place successfully and we are encouraged by the 1987 delivery timetable for all 20 centers. Host appears to be one component of the NAS Plan that FAA can be justifiably proud of.

AOPA strongly recommends that all aspects of AAS implementation be re-examined to ensure that technology has not overtaken it and that the system can be integrated with satellite systems. The Host will provide for adequate capacity while this critical evaluation is conducted.

Microwave Landing System (MLS)

First introduced in the early 1970's, the MLS program is now caught between FAA commitment to continue implementation and increasing user doubts concerning the system in light of program setbacks and delays. The initial procurement of MLS ground stations is already two years late and falling further behind. In large part, advancing Instrument Landing System (ILS) technology has short-circuited many previously sold benefits of MLS.

Communities have been denied precision approach capability far longer than safety can afford due to the decision to suspend ILS installations in favor of MLS. However, we are reassured to an extent by an apparent willingness on the FAA's part to install a limited number of ILSs and to reconsider the total number of MLS units that are truly needed.

FAA cost estimates for MLS are still far from reality. The 1987 budget request asks for funds to procure MLS avionics at $78,000 per aircraft, and MLS ground stations at more than $760,000. The first number is quite high (by at least 200 percent), and the second number is low. At the most recent International Civil Aviation Organization (ICAO) meeting of the Special Committee on Future Air Navigation Systems, a report was given on one of the first attempts to procure and commission an MLS for an international airport. The cost to accomplish the installation of MLS, without achieving current ILS approach minimum capability, exceeded estimates by a factor of three!

It is important to emphasize that FAA has not yet completed development in the MLS program which will permit use of MLS for category II or III approaches required by air carriers, nor provided assurance of the system capacity increases alleged to accompany the MLS implementation.

Despite these drawbacks, airborne avionics costs will fall to a level attractive to the broader segment of users only if air carriers, who can afford the initial, artificially high prices, "prime the pump." Installation at air carrier airports already served by ILS will stimulate avionics production while providing early benefit to the air carriers. Continuing the ILS implementation will immediately expand precision approach capability.

AOPA recommends that by 1998, the FAA install MLS at airports to meet international agreements and where ILS already exists, to realize what capacity enhancements are available. We also recommend an aggressive return to ILS installations. There are hundreds of communities which need a precision approach capability at their airports. Prompt installation of ILS at those airports is the only way that requirements can be fulfilled if they are not to wait for as much as twelve years for MLS.

Mode S

Mode S may eventually provide a limited data link capability for communication from the ground to aircraft in flight. However, it will not provide surveillance service to aircraft operating at altitudes below 8000 feet or lower at most locations. Most significantly, Mode S will never be compatible with satellite communications, the promise of the next decade. Mode S will not provide meaningful communications service until after the mid-1990's; yet, the U.S. airlines will own and operate a satellite communications system by the late 1980's.

AOPA enthusiastically supports FAA's implementation of the mono-pulse Mode S ground radar equipment because nearly all of the benefit to be derived from Mode S (radar accuracy, reduced clutter and reduced controller work load) result from that technology, not from airborne Mode S transponders. The current ATCRBS transponder is compatible with all elements of the Mode S implementation and should be protected. Further, the much-touted advantage of Mode S data link has failed to capture user acceptance and is not yet operationally proven.

Traffic Alert and Collision Avoidance System (TCAS).

The FAA has spent in excess of $50 million and more than 20 years in an effort to create a workable air carrier TCAS device. Still, we are a long way from a production model TCAS, despite the large investment. While technology has proven a significant block to TCAS development, dedication to the concept and aggressive pursuit of solutions have been less than desired.

This program should be afforded the highest priority so that the potential safety benefits for air carriers can be realized at the earliest possible time. We are very close to the long-awaited airborne collision avoidance system; extra emphasis is needed to get this moving.

Automated Flight Service Stations (AFSS).

This initiative provides the best example of the FAA's inability to develop and implement a relatively modest single program. The theory behind this program was to provide pilots with better pre- and in-flight weather and operational services through automation. A subset of this was to have been a significant cost savings afforded by consolidating 320 manual flight service stations (FSS) into 61 AFSSs. The consolidation was to have led to the release of 25% of total FSS personnel by 1990 due to efficiencies gained.

The automation of the FSS system is now seven years behind schedule and the transition to the AFSS system is littered with broken promises, inadequate performance, abandoned elements of the program, and personnel mismanagement. A program that started out with such lofty ambitions has turned out to be a monument to poor management and inefficiency.

Automation was to have been accomplished in two steps. The first step, Model 1, was to have given an initial operational capability to 37 AFSSs and an enhanced version, Model 2, was to have been installed in the remaining 24 new locations prior to being retrofit into the original 37 automated locations. While Model 1 was developed with only a slight delay, Model 2 development soon lagged so far behind that work was stopped on it in 1984. The indecision and lack of direction that ensued convinced the Congress to withhold further funding for Model 2 development. While the benefits of Model 2 will be missed, a larger problem is involved.

Without Model 2 equipment, the final 24 AFSSs cannot be automated as the equipment for those locations was a part of the Model 2 appropriation. As of today, some 116 FSSs will be consolidated into 24 non-automated "AFSSs." Immediate action must be taken to provide full capacity Model 1 automation for those locations if service levels are to remain barely adequate. None of the 116 old stations must be allowed to close prior to automation equipment being installed.

As AFSSs were to be brought on line, flight service specialists were to be slowly released, commensurate with productivity gains. Although the consolidation of FSSs has been delayed by up to seven years, the drawdown of personnel has proceeded as scheduled. As a result, there are severe staffing shortfalls in every FAA region, resulting in some seventy of the existing 200 being placed on an "emergency" part-time basis. This has denied users critical flight information during hours of darkness and in inclement weather. A minimum of 280 additional specialists are required to bring staffing levels back to an acceptable level.

This program must be put back on track to provide much-needed safety-of-flight information to pilots. Completion of Model 1 automation, continued development of Model 2 enhancements, and adequate staffing are essential to the AFSS program.

Weather Systems

Next Generation Weather Radar (NEXRAD), Automatic Weather Observation System (AWOS), Central Weather Processor (CWP), and Terminal Doppler Weather Radar (TDWR) are all programs of critical importance to us. Weather remains the single greatest cause of fatal accidents in general aviation; improvement in the ability to get accurate weather to the pilot is essential.

Full availability of these systems is up to three years behind the 1983 forecast. New emphasis must be placed on these and related programs if we are to make any progress in reducing the number of fatal accidents due to weather. These initiatives hold the highest near-term safety payoff of any single group of programs in the NASP.

System Capacity

After safety, the next greatest near-term payoff from the NASP will be ATC system and airport capacity increases. Demands on the system are increasing at a rate that may soon cause an aeronautical gridlock if new methods for accommodating this demand are not found. While the principal causes for delays are lack of adequate airports and inefficient air carrier scheduling practices, technology can yield significant incremental capacity gains.

AAS is advertised to provide the greatest capacity gain within NASP, yet other, smaller programs can help us prior to 1994. The better definition provided by Mode S, improved long-range and terminal radars and upgraded radar computers will allow closer spacing of aircraft. Improved weather detection and dissemination systems will help decrease the existing 60 percent system delays attributed to weather. New flow management programs will provide for more dynamic means of handling peak traffic. All of these items taken together will provide much needed capacity increases.

But, many of these programs are three, four, even five years behind schedule. As with weather systems, these items must be pursued aggressively to provide needed capacity increases.

System Engineering and Integration (SEI) Contractor

The Martin-Marietta Corporation is already three years into a ten-year, $700 million contract designed to "provide management and technical support for the implementation of the NASP." We have not seen sufficient results from this effort to justify the expense involved.

The General Accounting Office (GAO) has testified before the Congress several times regarding its concern for FAA's ability to effectively implement the NASP. It is our understanding that this was to have been one of the principal functions of the contractor. Given the critical remarks by GAO, we cannot possibly be getting much for our money.

The original contract was touted as a partnership between the contractor and the FAA. It is our impression that a true partnership was never formed and that the contractor has been relegated to a subservient role with few management powers. While the FAA has recently acknowledged that their relationship with the contractor must be changed, we have seen no substantive result of that revelation. We encourage the Congress to critically oversee the change in this relationship so we can get full value out of this important contract.

The NASP has not started well and is beset with many problems. The plan must be put back on track if we are to realize the promise of this grand scheme.

We are disturbed when we hear the FAA citing the "milestones" of contracts awarded, funds obligated and percent of the plan in progress as if these were the true measures of success. While these indices may make good press, they only serve the system designed to track real progress; they do not constitute progress themselves.

Real progress comes in the form of hardware produced and tested, systems integrated and operational evaluations conducted. These must be the true indices of progress towards full implementation of the NASP.

We must be sensitive to the time constraints imposed on us by system demand and advancing technology. If these programs are delayed to the point where demand has outstripped the potential for the Plan to accommodate it, we have lost a great deal of potential effectiveness and are placed far behind the next generation of planning. Similarly, if we allow advancing technology to overtake that used by the Plan, we have wasted much of our efforts to date and will have to work doubly hard to catch up to the next Plan.

There must be a new sense of urgency and dedication regarding the NASP if we are to realize its full potential.

Senator FORD. Let me apologize to you. "Baker" does not spell "Sheehan." So, Mr. Sheehan, I do apologize.

Mr. SHEEHAN. That is OK. I am a last minute substitution.

Senator FORD. I did not have it here, and I did want you to know that I do recognize the difference.

Mr. Stimpson.

Mr. STIMPSON. Thank you, Mr. Chairman.

I will briefly summarize my statement. We feel there is nothing more important than what this committee is doing now in looking at the reauthorization of the Airport and Airway Act for the next, hopefully, five years.

Despite the fact that general aviation sales have been extremely depressed and continue to be extremely depressed, flying activity has maintained itself. In fact, in 60 of the busiest airports for general aviation last year, flying activity was up by about 6 percent.

We think that a five year program is extremely important in order that you get the planning, the funding, the taxing levels established so you can do long-range planning and implementation of this system. Obviously, adequate funding levels are also extremely important.

One thing in particular I would like to mention is the reliever airport set-aside that is in the current bill, ten percent of the money going to reliever airports to help relieve the congestion at the big hubs. In actuality, FAA has spent about 13 percent of the airport funds in reliever airports. This is certainly a key item which we hope you will put in this bill, again, to assure that reliever airports around the big hubs continue to be developed in an expeditious and adequate fashion.

In fact, 25 percent of the general aviation airplanes in the fleet are located on the reliever airports. Now, this is not to demean any of the other general aviation airports throughout the country. Many of these smaller airports, as you know in your home state, are very important in economic development and providing the link in the air transportation system.

We also hope you will include a penalty clause or trigger tax mechanism in this bill to again help force spending of the $5 billion plus surplus on some of the things which need to be developed in this system. Precision approaches and others are not getting adequate funding today.

Now, many of the criticisms you have heard today I will not get into further. They are talked a little bit about in our statement. But many of these problems are transition programs where we are going from one system to another, and we again would urge that we move ahead, not delay, not stop on some of these, that we keep doing the re-evaluation that you are talking about, that we proceed wholeheartedly with the system modernization.

In conclusion, we too are concerned about what is going on in the Budget Committee, because if you adopt a budget resolution which freezes many of these very favorable funding levels which have been recommended, the actions that you will take in this committee will again be frustrated in the years ahead.

So we look forward to your leadership in helping us work through this very difficult situation.

[The statement follows:]

STATEMENT OF EDWARD W. STIMPSON, PRESIDENT, GENERAL AVIATION MANUFACTURERS ASSOCIATION

I am Edward W. Stimpson, President of the General Aviation Manufacturers Association (GAMA). GAMA represents U.S. manufacturers of general aviation airplanes, engines, avionics, and other aircraft components. GAMA companies have manufactured over 95 percent of the general aviation airplanes in the U.S. fleet today.

The Airport and Airways reauthorization legislation facing the 100th Congress is a major challenge with profound implications for the entire nation—not just the aviation community. Highly publicized mid-air collisions in recent months raise concerns among citizens on the ground as well as travelers in the air. Public complaints of crowded, unsafe skies, annoying delays in air travel and various misinformed allegations about general aviation underscore the need for prompt, prudent legislative action. Safety and capacity improvements in our aviation infrastructure are urgently needed. Fortunately, the Administration, the Congress and the public, as well as the aviation community, recognize that action must be taken now.

Safety remains the number-one priority of our industry. We are encouraged by the continuing downward trend in general aviation accident rates. The NTSB reported record low rates for general aviation in 1985, only to have even better rates to report for 1986. Nonetheless, we remain determined—not complacent—to see this improvement continue. Even a single accident is one too many.

Despite the depression that has plagued the production of new aircraft for the past several years, we remain a major user of our nation's airspace. Our active fleet of 210,000 general aviation airplanes in the U.S. flew 34 million hours in 1986 compared to 8.5 million hour flown by the commerical air carriers. The major growth in general aviation flying is in business travel. The FAA's most recent survey of business jets shows a 4 percent increase in total hours flown, and in increase in the number of hours flown per aircraft as well. Moreover, general aviation activity at the 60 busiest general aviation airports increased 6 percent over FY-85 levels.

Business is becoming more and more dependent upon the flexibility and wide geographical access that general aviation provides. Add to this the dramatic increase in general aviation's role in parcel delivery and mail service, and the positive impact we have on cities and towns without major airport service, and it is apparent that general aviation plays an ever-increasing part in our nation's air commerce. We are vitally interested in the continued modernization and expansion of our air transportation system. Failure to move quickly and decisively to reauthorize funds for necessary system improvements would constitute a great disservice to our nation.

REAUTHORIZATION PERIOD

The reauthorization period should be long enough to provide stability in planning and implementation. Inasmuch as the entire capital expenditure program, and much of the operating program, is to be supported by user charges, authorization for a ten year period would be feasible if some trigger tax mechanism were adopted. A five year authorization should be the minimum period considered under any circumstances. The two year period proposed by the Administration would increase uncertainty as to the degree of national commitment to a modern air transportation system, and start an immediate debate over the next reauthorization bill.

A STRONG, ADEQUATE AIRPORT SYSTEM

Air travelers who use our major airports are well-aware of the congestion and delays that plague our commercial air service. I suspect every member of this committee has experienced these problems. General aviation users experience many of these same delays. Some corrective solutions are obvious: larger facilities, more runways, better terminal traffic control. Unfortunately, there are serious physical limitations for these improvements at many of our major airports. Often the only alternative is additional airports.

THE RELIEVER AIRPORT

By definition, a reliever airport provides relief for another airport by accomodating additional air traffic within a given destination area. They should offer the same instrument landing capability so that traffic will not be directed to the major facility when it can least accept it—in marginal weather.

Relievers have been tried and have proven their effectiveness at a number of locations. In fact, the 238 reliever airports are home for nearly one fourth of the entire active general aviation fleet. The FAA has allocated to relievers more than the mandatory 10 percent of airport funds prescribed in the Airport and Airway Improvement Act of 1982. Strong federal funding of reliever airports is essential for any real airport system capacity improvements. We urge the continuation of a set-aside of at least 10 percent.

GENERAL AVIATION AIRPORTS

Only 570 of our nation's 16,000 airports provide commercial air service. The remaining 15,000-plus serve the air transportation needs of thousands of communities, large and small. During the last 10 years, no new commercial service airports have been built. The considerable growth in commercial air service has occurred at existing major facilities or though the expansion of general aviation or reliever airports. These smaller airports tend to grow along with the communities they serve. This makes it especially important to adequately fund general aviation airports.

The projected demand for Airport Improvement Program (AIP) funds is substantial. The FAA has identified over $24 billion in requirements over the next ten years, and has stated that $8-9 billion is needed for safety improvements alone. The Administration's budget request of $1.017 billion for AIP in 1988 is not consistent with the documented need. Clearly it is up to the Congress to authorize realistic amounts for the vital Airport Improvement Program; $1.5 billion should be the absolute minimum.

Some of today's best experts on the economic benefits of general aviation airports and their positive influence on local economies are in the state aviation agencies. Because they are sensitive to local transportation and trade needs, some states have developed excellent planning and funding systems for their airports, often in close coordination with the FAA.

Today a system of "channeling" is used in many states. This system requires that airport federal fund requests must first be approved and prioritized by the state aviation agency. This allows the state to "channel" federal money where it is most needed. In most cases, this "channeling" system is very effective. We can see an enhanced role for states in the apportionment process where the state aviation agencies have adequate expertise and resources to manage the process. However, because of regional metropolitan planning considerations, we believe that reliever airport grants should be administered as they are currently.

JOINT USE

I cannot conclude my discussion of airports without mentioning an area where airport capacity near some metropolitan areas goes unused every day: underutilized military and taxpayer-owned airports.

The 1982 Airport and Airway Improvement Act mandated a study by the DOD and FAA on the possible use of some military airfields by civil aviation. While the study was completed, nothing has come of it. In fact, the subject has been studied to death; it is time for action.

We certainly do not advocate civil access to military fields where a civil presence would detract from the military's mission. But there are airfields where joint use is feasible. Excellent joint use agreements are already in effect at Charleston AFB, South Carolina and Myrtle Beach, South Carolina, and a joint use agreement for Scott AFB, Illinois is being favorably considered. There are also many civil airports with military tenant units with sensitive missions. Military units and civil users here seem to coexist just fine.

There are many other airports, however, where the military departments have rejected joint use. Dobbins AFB, near Atlanta, could be used as a badly-needed reliever, thus relieving Hartsfield. Honolulu needs reliever airports, but nearby military fields such as NAS Barbers Point and Wheeler AFB ban civil traffic. Other possible joint use sites are El Toro MCAS, NAS Glenview, NAS South Weymouth, NAS Willow Grove, and Davison AAF.

Current joint use airports have demonstrated that the security needs of the military can be met while still allowing civil use. It is tragic that additional, mutually-agreeable pacts between civil and military users cannot be made so that valuable airport capacity is not wasted and this national resource is not lost.

AIRWAY IMPROVEMENT PROGRAM

In 1982, the FAA's National Airspace System Plan (NASP) charted a ten year program to upgrade the facilities and equipment of the air traffic control system. At the close of 1986, despite numerous funding cutbacks and program delays, over 70 percent of NASP projects were under contract, and first deliveries had been made on over 40 percent of the NASP projects. While there are some technical problem areas, NASP implementation must remain a high priority.

We are at the point now where any funding cuts will have a definite adverse effect on the NASP schedule and the capacity improvements that the NASP will bring. We believe that the Administration's requests for F&E funds in FY 1988 and FY 1989 should not be reduced and, in fact, similar authorizations should be made for at least 5 full years.

There is a shortage of precision approach systems at reliever and general aviation airports. Precision approach aids are one of the best ways of increasing the margin of safety at an airport. We believe that all airports receiving scheduled commercial air service and all reliever airports must have precision approach systems. Since technical problems are delaying MLS installation, an interim purchase of ILS's should be undertaken.

We are also concerned over installation of the new Automated Flight Service Station equipment. The failure to proceed with full capacity Model 1 FSS's, while at the same time allowing the number of Flight Service Station specialists to decrease, has made the weather briefing services in some areas unacceptable. Since some 40 percent of general aviation fatal accidents are weather related, we cannot allow the modernization of Flight Service Stations to be delayed.

The FAA's replan of the Advanced Automation Program (AAP) significantly reduces the technology risk of the AAP. The AAP is the real "heart" of the NAS Plan, because it is here that most of the benefits accrue. The AAP should proceed as replanned by the FAA.

We are also concerned that although aircraft operators have been directed to equip with more Mode-C altitute encoding transponders, a move which GAMA endorses, the FAA has been extremely slow to upgrade its enroute and terminal equipment to take advantage of the increased information Mode-C provides.

Currently, an enroute controller gets automatic conflict-alerts only when two IFR aircraft have a potential conflict. In only a few centers or terminal areas will the controller get an automatic alert if a VFR, Mode-C equipped aircraft conflicts with an IFR aircraft. In most centers, potential conflicts between VFR, Mode-C equipped aircraft and IFR aircraft are resolved only if the controller has time, and happens to see the VFR Model-C equipped aircraft.

Those centers that do have automatic, VFR Mode-C conflict alert today will lose the capability when the new host computer is installed. It will not be restored until the first software upgrade for the host computer is completed.

We believe the FAA must upgrade all enroute centers with automatic, Mode-C VFR conflict alert functions, and that the host computers must have this capability *when installed*. We also believe that the FAA should upgrade terminal areas with automatic, Mode-C VFR conflict alert functions.

RESEARCH AND DEVELOPMENT (R&D)

The Administration's request for $150 million in R&D funds is inadequate. We believe that additional funds should be specifically designated for research into airport capacity improvements. In some cases, such as reduced traffic separation for parallel or converging runways, significant airport capacity improvements are feasible, but research and development of new radar sensors is needed to ensure these operations are safe. A level of at least $200 million should be authorized.

Some argue that R&D funds can be held at low levels because the R&D for the NASP has been accomplished to a major degree. This argument ignores the impact of rapidly changing technologies in all phases of aviation, and especially in the areas of navigation, communications, and surveillance. R&D funding should be sufficient to encourage testing and adaptation of satellite technologies so that eventual smooth transitions can be made to newer and better methods of providing airway services.

An additional area that might require further funding is TCAS III development.

OPERATIONS AND MAINTENANCE (O&M)

The Administration's proposal to fund 85 percent of the total airway budget from the Trust Fund is unreasonably high. The Trust Fund was originally established to meet the capital needs of our Airport/Airway System first and foremost. User fees or taxes were imposed to provide the necessary, dedicated revenues. The understanding was that any surpluses left over from capital programs could be used to fund O&M—not the reverse. The implication in the Administration's request is that the users derive 85 percent of the system's benefits and, hence, should pay that amount—without regard to capital needs. This attempt to get aviation users to pay such a huge percentage of airway costs, which serve the common good, must be recognized for what it is: a ploy to divert dedicated revenues to offset the growing budget deficit.

In 1982, the authorizing committees of Congress approved a penalty clause in the Airport and Airway Improvement Act. It tied O&M authorizations to the level of AIP authorizations with a 2:1 penalty for F&E underfunding. This provision has served to protect the dedicated, user-provided Trust Fund account, but has contributed to a surplus in excess of $4 billion.

Some provision to protect the Trust Fund must be included in any reauthorization bill. It may be a penalty clause or a "tax trigger" which would reduce or eliminate user taxes if the Trust Fund grew too large—or a combination of the above. Such action, in our view, is absolutely essential.

One proposal to insure the direct application of Trust Fund monies to authorized programs has been introduced already this year. S. 784 would remove the Trust Fund from the budget process. We strongly support this bill and we urge you to seek its passage.

We appreciate the fact that the Administration's bill does not propose increases in passenger and fuel taxes on the users of the system. However, we are concerned about two proposals contained in the Administration's bill. The first is the passenger facility charge. We think the Congress acted wisely in prohibiting "head taxes" a number of years ago and this prohibition should be retained. Secondly, the proposal to repeal Section 344 of Title 49 would open the door to a whole series of new charges on the users. Congress also prohibited this action several years ago when it became obvious that so-called "administrative fees" were an attempt to recoup portions of the FAA budget. The magnitude of these fees for the performance of FAA safety and regulatory functions would be substantial. We urge you to reject this proposal, since adequate funds are being derived from current user tax levies.

One final comment on the Administration's bill: we would like to repeat and strees that a two-year authorization act would be totally inconsistent with the long-range programs of the FAA. The five-year acts we have had in the past have supported FAA planning objectives up-front. To accept a shorter-term act would tend to frustrate such planning, compromise expectations, and impose upon the Congress the need to deal with reauthorizing legislation again in just two short years. We strongly encourage a 5-year authorization act like those that have served us well in the past. Should changes be required at mid-term, the Congress can readily deal with them.

Senator **Ford**. Mr. Schneider.

Mr. **Schneider**. Mr. Chairman, it is a pleasure to appear before you today.

PASS is the sole representative of the FAA's technical work force. The systems we provide—the radar, computers, communications, et cetera—are the literal eyes and ears of the controller work force and the cockpit crews. I guess in many ways we could be considered the backbone of the National Airspace System.

We are sure that this committee is already familiar with the background of the NAS plan. The plan is currently projected to be $5.8 billion over the original estimate of $10 billion for implementation. In spite of the massive cost overruns, PASS still considers the NAS plan a viable expenditure for the US Government.

Professionally speaking, we cannot continue to make antiquated equipment function properly without adequate logistical support. Due to the age of the existing equipment and technological changes in the electronics industry that have taken place over the last few decades, we need to continue to modernize the National Airspace System at its very core, the equipment and systems.

This change to modern state of the art equipment will be welcomed by our profession. There are other reasons to modernize the FAA's equipment inventory. Aging equipment is contributing to the economic hardships of the airline industry.

In the year 1985, two percent of the over 330,000 delays recorded by the FAA were attributed to NAS equipment interruptions. For the first six months of 1986, the percentage had already risen to 2.4 percent of the 181,000 plus reported delays. That is about 11,000 delays that should not have happened.

We need to define the term "equipment interruptions 'used in this report by the FAA. In plain English, equipment interruptions cited here are a total collapse of the system. We believe these FAA figures clearly indicate what corporate airlines are already painfully aware of: Delays are increasing, safety is decreasing, causing escalated costs to companies, inconvenience and hardships to the flying public. We feel that more modern equipment, once installed and proven, will be able to decrease the percentage of delays caused by NAS system failures.

We further believe that there is another area the subcommittee and Congress must closely scrutinize in the NAS plan strategy of the FAA.

The plan was partially sold to Congress because of its proposed reductions in manpower. These textbook projections were predicated upon systems that had not yet been installed or proven in a real life environment. Because of these projections, the FAA technical work force was allowed to dwindle from over 11,400 in the late 1970's to barely over 5500 at the end of 1986.

Unfortunately, as we lost specialists we lost the ability to meet installation schedules and training requirements on the new systems also slipped. We also lost the ability to make needed modifications to the equipment once it had been installed in the field.

Our technical work force is one of the oldest, if not the oldest, in the Federal government.

There is a need for Congress to mandate to the FAA that staffing levels in the airways facilities be dramatically increased during this fiscal year. We have been led to believe by the FAA that it will increase its field maintenance staff by 328 by the end of fiscal year 1987. To properly accomplish this and keep pace with this year's attrition would require the hiring of approximately 1,000 new systems specialists. Our field reports do not verify a hiring program of this magnitude.

In our opinion, the number of systems specialists needed nationwide is 9,000 to maintain the system. We would again caution the Congress not to blindly follow the unproven plans laid out by the FAA. A number of GAO reports, as you have heard this morning, have echoed this warning.

In closing, we recommend continued implementation of the NAS plan of the eighties. We feel the FAA should evaluate its slippage in timetables and that impact on staffing. Corrections need to be made now for past mistakes. We ask that you consider the employees of the agency, as well as the technology, when you consider who the next Administrator will be.

We appreciate the good things the Admiral tried to accomplish for us while he had the helm.

Thank you.

[The statement follows:]

STATEMENT OF MARK E. SCHNEIDER, EXECUTIVE VICE PRESIDENT, PROFESSIONAL AIRWAYS SYSTEMS SPECIALISTS

Mr. Chairman and Members of the Subcommittee:

It is a pleasure to appear before you today. We appreciate your invitation to share our views, opinions and expertise concerning the National Airspace System (NAS) Plan of the FAA. For the benefit of the new members of the Subcommittee, I would like to devote a little time to explain who the members of the Professional Airways Systems Specialists are and the function they perform for the flying public of this country.

PASS is the sole representative of the FAA's technical work force. Recently, we have expanded and are now starting to represent the systems specialists employed by the Department of Defense as well. We are the individuals who provide the radar, computers, communication, navigational and environmental systems used by both controllers and pilots in the performance of their jobs. These systems are the eyes and ears of the Air Traffic Control work force and the cockpit crews. It is our expertise that keeps these systems running. In many ways, we can be considered the backbone of the National Airspace System. Because of the uniqueness of our profession, we can offer a special insight into your deliberations on the NAS Plan of the 80's.

We are sure this committee is familiar with the background of the NAS Plan of the 80's from its inception in 1981 to its Congressional approval in 1982. The NAS Plan book has been revised four times. The most recent revision took place at the request of Congress in June of 1986. The plan is already projected to be running 5.6 billion dollars over the original estimate of $10 billion for implementation. In spite of the massive cost overruns, does PASS still consider the NAS Plan a viable expenditure for the U.S. Government? Our answer is a resounding yes.

We believe that the current authorization bill has contributed to the overall system. We would like to point out that this contribution has been made at the expense of safety in some areas. To Meet the ever increasing demands placed on our aviation system the next authorization bill will have to be more realistic and less idealistic. To help cope with the increased capacities being sought by the airlines we must insure that the capital expenditures necessary for the new radars, ILS's, computers, communication and navigational systems are insured. It makes no sense to our organization to guarantee the funds for terminal improvements and not have adequate landing systems in place. If we increase the number of people who can use an airport by expanding the terminal and not have needed navigational aides in place we have done a disservice. In reality all that is accomplished is more people have been exposed to a larger risk. This is not the intent of this subcommittee or the Congress. We are sure that if asked the majority of the consumers whose taxes contribute to the Trust Fund would want the money spent first on safety and secondarily on efficiency increases. If an increase in funding for

FAA operations is needed to increase safety, then the Trust Fund should have provisions for these increased expenditures. If we need more controllers and system specialists to insure the safety of the flying public then we must find the money somewhere. If there is a multi-billion dollar surplus in the Fund, it would be a logical place to look for the funding. That would better serve the people who are being taxed than to have this surplus sit idle so as to make the deficit look smaller.

Due to the age of the existing equipment and because of the technological changes that have taken place in the electronics industry over the last few decades, we need to continue to pursue the modernization of the National Airspace System at its very core ... the equipment and systems. The change to modern, state of the art equipment will be welcomed by our profession. Currently we must maintain an in-depth knowledge of circuitry that ranges from the vacuum tube era all the way to microcomputers. We look forward to the long overdue cessation of vacuum tube technology in the FAA. We realize that no matter how competent we are, we cannot continue to make antiquated equipment function properly without adequate logistical support. Equipment is still in use today that bears the name of the FAA's predecessor, the CAA. There is even equipment in use today that is of World War II vintage. Recently the FAA celebrated fifty years of aviation in air traffic control. It is quite possible that some of the equipment used then is still in use at some FAA facilities today. This equipment must be replaced. It was not designed for the aviation system that we have today.

There are other reasons to modernize the FAA's equipment inventory. Aging equipment is contributing to the economic hardships of the airline industry. For the year 1985, 2 percent of the over 330,000 delays reported by the FAA were attributed to NAS equipment interruptions. For the first six months of 1986, the percentage had already risen to 2.4 percent of the 181,000+ reported delays. While our figures do not allow us to compare 1986 year end total percentages to 1985 figures, our field reports give us no optimism of any improvement. We also need to examine and clarify the term "equipment interruptions" used in this report by the FAA. In plain English, equipment interruptions cited here are a total collapse of the system. For safety reasons, most systems that we are responsible for have primary and back-up sets of equipment. If the primary system fails, the controller and pilot are still able to use the back-up system. The numbers we have just quoted to you from the FAA's own figures are outages when both the primary and secondary equipment are out of service. It is imperative to point out that the decrease in safety for air crews and passengers when there isn't a back-up system available isn't even tracked or considered.

We believe these FAA figures clearly indicate what corporate airlines are already painfully aware of -- delays are increasing, causing escalated costs and inconvenience to the flying public.

Airlines are unable to meet schedules. Passengers miss connections on a regular basis at various terminals and businessmen are finding it impossible to meet schedules. These delays effect you, your co-workers, and constituents alike. Once a system has failed the fact that a passenger is a company president, senator, laborer, or vacationer no longer matters. Inconvenience is shared by all. We feel that more modern equipment, once installed and proven, will be able to decrease the percentage of delays caused by NAS system failures. Most importantly, the safety hazards to the airborne aircraft will be decreased when systems fail.

We have indicated a definite need for the new equipment proposed in the NAS Plan of the 80's. This equipment will help relieve problems that we, as professionals, experience daily. We further believe there is an area that this Subcommittee and Congress must closely scrutinize in this NAS Plan strategy of the FAA. The plan was partially sold to the Congress because of its proposed reductions in manpower. These textbook projections were made predicated upon systems that had not yet been installed or proven in a real life environment. Because of these projections, the FAA technical work force was allowed to dwindle from over 11,400 in the late 1970's to barely over 5,500 at the end of 1986 through attrition. The FAA saw no need to replace these individuals, believing new, modern equipment could do that.

Unfortunately, the agency's projections fell far short of reality in its ability to install the equipment. As we lost specialists, we lost the ability to meet installation schedules and training requirements on the new systems. We also lost the ability to make needed modifications to the equipment once it had been installed in the field. Unfortunately, when the FAA made its personnel projections in 1981, it did not have a true demography of its technical work force. Even though this was pointed out by PASS, the agency rushed headlong down the attrition trail. By the time a demography was finally completed, it revealed that this technical work force is one of the oldest, if not the oldest, in the federal government. As the FAA fell farther behind the power curve, the NAS Plan did likewise. Our testimonies before you and other Congressional Subcommittees last year clearly addressed this problem and showed the potential ramifications.

We are still a work force that is stretched too thin. It will be years before the new people, when hired, will be adequately trained. These conditions will continue to play a major role in our ability to maintain the National Airspace System, even with the new equipment. There is still a need for this Congress to mandate to the FAA that its staffing levels in Airways Facilities must be dramatically increased during this fiscal year. We have been led to believe by the FAA that it will increase its total field maintenance staff by 328 by the end of fiscal year 1987. To properly accomplish this will require the hiring of approximately 1,000 new systems specialists if we are also to replace the 600 specialists eligible to retire this year. These new employees would make up approximately 1/6 of our total work force, and it will take between three and six years to train them. We welcome this increase, the first we've had in years. Unfortunately, it is too little, too late.

We believe this Congress should mandate to the FAA a minimum number of Airways Facilities specialists similar to your mandate concerning the Air Traffic Control work force. Appropriations should be found for the FAA to start to increase these numbers as quickly as possible. If not, we will suffer an identical problem to that currently suffered by Air Traffic Control. Our performance level numbers will fall far short of the those actually needed to maintain the system. In this case, though, we will not be dealing with single sectors, or limited airspace having to be combined with adjacent sectors. Instead, needed maintenance and repair work will go undone. System outages affecting numerous control positions, pilots and passengers will take longer to restore.

In our opinion, the number of systems specialists needed nation wide is 9,000. This number should be maintained to allow the FAA to adequately absorb attrition, hire the needed replacements and train the new employees as well as the existing work force on the new systems. This number would still allow a manpower savings of approximately 20 percent over the manpower levels of the 1970's. We are rapidly becoming aware that the numbers we are currently maintaining are far from adequate. We submit that this decrease in numbers is a contributing factor in the increase of center outages which have caused an increase in NAS system related delays.

We would again caution this Congress not to blindly follow the unproven plans laid out by the FAA. A number of GAO reports have echoed this warning. In July of 1986 the GAO issued a report on the FAA's Advanced Automation System. In the report it stated that the acquisition strategy proposed by the FAA was very risky. In June of 1985 the GAO cautioned that more realistic performance tests were needed before production began concerning the FAA's host computer.

Our own experience has taught us that the FAA's personnel staffing levels are not realistic and should be reevaluated. We believe that certain areas of the NAS Plan must be totally in place before other actions are taken. Only after a system is installed, certified and has proven itself over a period of time can we actually begin to understand what kind of maintenance is needed. Only when we truly understand the maintenance requirements of the new systems, some yet to be developed, will we be able to know exactly how and where we need to disburse our work force. The idea of closing down FAA facilities in their entirety or changing from manned to unmanned facilities, as is currently planned, is premature at this point. The idea to consolidate offices as now outlined in the plan could be an exceedingly costly mistake if the installation of the needed equipment stays years behind schedule.

We believe and recommend to you that the FAA's current system of Sector Field Offices and Airways Facilities Sectors should remain intact until there has been an adequate opportunity to truly evaluate the savings that new equipment would realize. Once the relocation of employees has taken place, it will be too late. Our members would not look favorably upon being asked to relocate and then later be asked to move back. Employees should not be subject to the traumatic process of selling homes and uprooting families without just and proven cause. We would also remind you that relocations are extremely costly for the government. While the needed NAS plan modernization is a very expensive proposition, we, as concerned citizens, must still be cognizant of attempting to get the best investment for our money. If delaying the process for a short time will give us a better idea exactly where to spend our dollars, we strongly advise this course of action be followed.

As we have mentioned earlier, the NAS Plan of the 80's is needed and our organization feels that positive gains can be made from its total implementation. We also believe the NAS Plan could become a turning point in the FAA for more than just technological reasons. Our work lives as professionals will dramatically change with the implementation of this plan. If handled properly, the NAS Plan could also be used to help solve problems the FAA has long suffered in its employee attitude department. If the humanistic issues are prioritized, we may be able to improve the employees' opinion of the agency. Recently the FAA completed and diagnosed an employee attitude survey. The survey results can be interpreted a number of ways depending upon whether you are an optimist or pessimist. Realistically, there was some improvement over the survey two years ago. However, the agency still falls far short of what would be considered normal, acceptable levels of good morale for its employees.

With the changes that are coming in the near future in the modernization of the FAA, we will hopefully avail ourselves of this opportunity to improve employee attitudes as well as equipment performance. We ask that the same priority be given to the needs of the employees as is given to the technical requirements of the new system. We must never forget that the FAA and its employees are here to serve the flying public. We must never forget the FAA, in spite of all its technological advances, is still dependent upon the human element in order to achieve its mandate of service. If these issues are ignored, we will end up with an agency that is modern in its technology yet remains archaic in its treatment of employees.

Recently the FAA Administrator announced his desire to leave office. In the future you will voting on his replacement. Your deliberations and votes will do more to determine the morale of the FAA employees than anything else. If an Administrator is selected who will not recognize the importance of the FAA employee and his/her contributions all the funding you authorize will be meaningless. Admiral Engen tried to recognize this resource of the agency but was not totally successful. He could never get the bureaucracy to realize that the most important asset in the FAA's inventory is the federal employee. As his co-workers, we will miss him. As FAA employees we await your actions with anxious anticipation and uncertainty.

We also submit a serious internal resource of the FAA would be overlooked if the input from the employees' representatives was not sought. When new systems have been delivered to the field in the past, it has been this employee input that has resulted in the system finally working in the way it was intended. This willingness to do more than the bare minimum required by the job is one of the assets that make our profession so valuable to the government. It would be very easy to just install the equipment, turn it on and say, "Well, it's not working correctly. Send it back to the manufacturer." The professional pride of our members precludes this from happening. Our inherent desire to have equipment operate at the best performance level possible drives us to figure out what is needed to solve the problem and then do it. This is a resource that is rarely recognized or appreciated within the agency. This resource will be lost as staffing levels of experienced employees continue to decrease.

In closing, we recommend continued implementation of the NAS Plan of the 80's. We feel the FAA should closely evaluate the slippage in time tables and its impact upon staffing. We caution that some of the projected savings may never be realized. We urge that the systems be fully tested in a real life environment before either staffing adjustments or facility consolidations are effectuated. We believe the FAA should seek a larger degree of input from the employees concerning these projected changes.

Thank you for this opportunity to testify before you. If we can be of assistance in the future, please do not hesitate to contact us. Aviation safety is our top priority as well as yours.

Senator FORD. Thank you very much, Mr. Schneider.

I have got several questions. In trying to think about all of them, they get into the trust fund really and what we do with that.

But Mr. Stimpson, let me ask you this question. Much has been said about the trust fund. You related to it. The airport program and the NAS plan, in these two days of hearings we have bounced on them pretty good. Do you think that the programs in place are effectively working to serve the general aviation user?

Mr. STIMPSON. I think there are many good programs that are in place. I think the airport program that I mentioned, for example, the money to reliever airports, some of the money that is going to the smaller GA airports, those seem to be working pretty well.

Of course, you always have the need for more, and I think as we look at the surplus again we ask, why is that money not going to help relieve congestion in some places? I think on some of the NAS plan, many of these programs that have been announced, as you know, are dragging a bit. We would like to see, of course, better automation in some of the flight stations. We would like to see precision approaches at more airports.

There are more things we would like to see done. I think that we share many of the concerns that have been expressed here today. The bottom line is that the trust fund is not working as well as it should be working. Progress is being made, but there is a lot more that needs to be done and needs to be done faster than it is today.

Senator FORD. Sheehan, if Congress cannot approve of funding for the AIP and NAS plan at levels that would be, let me use the word, appropriate—that does not get into any high or low, but appropriate; and appropriate is I guess in the eye of the beholder—and the trust fund cannot be taken off budget—we have had some efforts looking at that some—for political reasons, what do you suggest that this committee consider doing to ensure that you and other users receive some benefits from the taxes that are paid?

Mr. SHEEHAN. Given those constraints, Senator, I feel the best thing to do is to keep the FAA's O&M funding from the trust fund at current levels. That is, the trust fund pays somewhere in the neighborhood of some 50 to 55 percent of O&M money right now, and for the third straight year the administration has attempted to raise O&M funding from the trust fund up to 85 percent.

If you can keep O&M funding down at current levels, you are going to free up a lot of money that could be used for the critical F&E and AIP projects.

Senator FORD. Will aviation users be willing to trade off higher O&M amounts from the trust fund in exchange for increased AIP funding?

Mr. STIMPSON. I would think that we would certainly be willing to discuss that and work towards an equitable solution. If you put the programs together, if you sit down and say, okay, this is what we are going to have, a $1.5 billion plus airport program and a NAS plan of $1.5 billion, and an R&D program, then you can see what you have got left over.

And that is another reason I think the five year program is so important. You can plan over a long period, and you put the capital improvements up first and you say, this is what we are going to do to improve the system from a capital expenditure, and then what is left over down here. Then you would say, okay, maybe a higher level could be achieved for O&M and still get these capital programs.

It is sort of putting the cart before the horse here, remembering that the trust fund was created to be a capital improvement first and O&M second. Sometimes this gets reversed.

And I think you could do that, perhaps, if you had a good long range plan.

Senator FORD. I have watched over my political lifetime. Where there is money in the pot, somebody tries to get their hot hands on it and use it and divert it for other uses.

Let us talk about reliever airports. And Mr. Schneider, I have got two or three direct questions for you, so do not feel like you are going to get off easy.

Both of you support funding for additional reliever airports. How many reliever airports should we have, and how can we better assure that they receive the needed funding?

Mr. SHEEHAN. I will be glad to start. We would be glad to start with what the FAA has proposed for additional reliever airports in the as yet unreleased 1986 version of the NPIAS, the national plan integrated airport system. Over a ten year period, they are calling for a minimum of 66 additional reliever airports.

Unfortunately, if we press ahead with what the administration has been forecasting for the amount of AIP that will be placed into reliever airports, we are never going to get there from here. If we look at the administration's proposal of a billion dollars a year for the foreseeable future, that is less than a third of what we need totally for not only reliever airports, but additional commercial service airports and, yes, even one or two more major hub airports.

Mr. STIMPSON. I think both of us also have a solution that is going to cost the taxpayer very little money, and that is the increased joint use of military air bases around the country. We are not talking about going to SAC bases or bases which have high strategic value, but underutilized military fields which could be opened up for joint use in a number of cities where there is an airport capacity problem.

And the last time around you directed a study and we got lots of words back, but not much action. And we would urge you again to take a look at the joint use of underutilized military air bases. This could help capacity at very little cost at some metropolitan areas of the country today.

Senator FORD. Do you have an opinion why the FAA and the Defense Department have been unable to reach an agreement on more of the shared use facilities?

Mr. STIMPSON. It is primarily a DOD problem. The base commanders do not want to fool around with civil use. There is sort of a parochial viewpoint here that, we are a military base and we do not want any general aviation airplanes or other planes in here.

Some places were joint use has been in effect, like Charleston, have worked beautifully. And in our view, I think it is just keeping the pressure up and seeing if there are not some places like South Weymouth, Massachusetts, and Willow Grove in Philadelphia and Glenview in Chicago and some others, where it is not time to take another look at this to see whether we could make some progress.

Mr. SHEEHAN. And if I might be able to add something to that, obviously we are great supporters of the concept of more joint use airports. The reason I feel that we did not get anything out of the last study is that the FAA did not have sufficient motivation to get in there and fight for the airports that are needed.

In our proposal for the reauthorization, the new reauthorization, we have proposed that a committee of users be assigned to the next study that looks at joint use airports. So you would have DOD, DOT, and users in there all looking at the issue.

I might point out to you, we have two very good examples in our own backyard here of underutilized military airports that could easily accommodate general aviation aircraft, and that is Andrews Air Force Base and Fort Belvoir, just south of the Beltway here.

Senator FORD. Mr. Schneider, let me ask you a couple of questions. Now, you discussed the need for adequate airway facilities specialists to make sure the air traffic control equipment remains operational. In your opinion, has your reduced ranks in any way compromised aviation safety?

Mr. SCHNEIDER. Yes, sir.

Senator FORD. In what way?

Mr. SCHNEIDER. We no longer are able to maintain what we used to call a preventive maintenance mode. We are now in a corrective maintenance mode. We can only respond at this point to outages after they have occurred.

Ten years ago, we used to prevent outages by taking equipment out during slow periods of traffic, the midnight shifts, the early morning periods of the day, do routine maintenance on it, find equipment that was due to fail but had not failed yet, coordinate with air traffic for a period when they could release it, they could notify the pilots it would be off, and we could then maintain it and get it back into operation and get it certified for safe use again.

We have lost that ability with our current staffing.

Senator FORD. So on a situation, you are reacting now instead of acting.

Mr. SCHNEIDER. That is correct.

Senator FORD. In your opinion, what part of the NAS plan should receive the highest priority from FAA, and what equipment is in the worst condition today?

Mr. SCHNEIDER. The communications equipment is probably the most vital, and there is a segment of it, the interface of it, that is in drastic need of overhaul, which we understand now the FAA is starting to overhaul.

There has been enough talk about the Host computers. That does need to be brought about. The 9020's are at overcapacity. But we also have to be cognizant that in bringing about the Host computer we will not solve all of the computer problems at the FAA.

Many of their problems are caused by interface equipment, which the Host computer will not be able to touch and which is not a capacity problem. So anyone that feels that the Host computer will solve all of the data problems at the centers is in for a very rude awakening in the next few months.

The radar, there are areas that need—that need to have increased radar, but I am not sure it is as high a priority as the en route control centers, communications and computer problems. When you stop to think that almost every flight will go through en route control centers somewhere during its flight, I would say your best and most effective way would be to solve their problems first, major terminals second, and get down to your medium and smaller density facilities as a last resort.

Senator FORD. Mr. Sheehan, you mentioned Martin Marietta. Are you of the opinion that they are closer now to being a full partner than they have up to now?

Mr. SHEEHAN. No, sir, not really. Of course, the Administrator just announced, I believe five months ago, that they were going to change the character of the contract with Martin Marietta to make them more of a partner. To date, they have given Martin Marietta program management control over four uniquely identified NAS plan projects. That is a start.

We think it has to go further than that, and it is my understanding that the FAA is proceeding in that direction. And I believe that they owe the Congress some words in that regard.

Senator FORD. I have met with all segments of that arena on at least two occasions and I was hopeful that we were beginning to see some progress. I think we have seen some, but not nearly enough.

Mr. SHEEHAN. I quite agree.

Senator FORD. I think that everybody has got to have a little piece and they do not want to let go of too much of it, so that they can continue to have something to work for. And I think once you reach a plateau there is always another one to go. I think all three of you gentlemen have expressed that adequately here this morning.

Once we get this one in place, the new technology is coming on. Communications is probably the fastest growing arena we have, and there is a great deal of competition. As I said earlier, I am afraid that our technology will be obsolete by the time we get it into place. So we need to continue to try to improve on it as we go.

Mr. SHEEHAN. Unfortunately, Senator, I think that has already happened in some of the areas in terms of radar communications and surveillance. There are systems now that have far surpassed what we envisioned in 1980, and we might be outstripped, not only by one generation of technology by the time we get to the end of the road, but it might be two.

Mr. STIMPSON. But at the same time, if you are always waiting for the end of the rainbow you may never get there, either. So I think it is a difficult call that you have to make.

Just one other comment on the Martin Marietta contract. I think it was wise to do something like that in the first place, because it was to give the FAA the help they needed, and I think it was a good step.

Senator FORD. In closing, let me just say this to you. You know, I believe, the problems that we have over here as it relates to the funding that we would like to give, particularly this Senator. I think you can throw too much money at it and not be able to handle it. But I think we can increase the amount considerably.

And I consider the expenditure from the trust fund revenue-neutral. Whatever you spend and you have something left, you are not overspending. So I consider that revenue-neutral.

The highway trust fund, we recently had a right close tussle with that one. This one may enter the same arena. And I believe that the safety of our airways, the elimination of delays, those things are so important to the traveling public, and the reliever airports and the smaller airports that are so important as it relates to industrial development, the help that we have—and I can see more and more every day about reliever airports. Where you have cooperation with the Defense Department, I can see that as a real possibility in several key areas. That would help, I think.

And I understand the parochial interest that is political. So what we are entering into here is a political fight as it relates to what we would like to do and what we will eventually. We talked about just a little bit more than the budget that was submitted to us, and we find that the back is rigid and the trench is deep.

So we have to figure some way to loosen at least the rigidness so that we can talk about increasing the funding. I fly into a lot of airports and I see the concrete and dirt stacked, waiting for the next funding to come, and they cannot go ahead and complete it.

We find some communities that are very fortunate, they want to be able to go ahead and spend some money and they are willing to sell bonds and to improve the situation. And yet, they do not have the authority to be reimbursed if they spend their own money and pay their interest on it. And that to me is not a way to get it done.

Let me talk to you about the hubs. Senator Exon gets a little carried away, like I do every once in a while. He is bigger than I am, so he gets carried away more than I do.

But I land at a certain hub going back home, and when you go down to get on the flight either to Lexington or Louisville there are six, I believe—and I know there is five, maybe six—flights that leave at the same time. To different cities, but they leave at the same time.

I only hope that when I make that trip, that they call my flight toward the top rather than toward the bottom, because if I am the last called, I am 30 minutes late. And I know that before I ever get on the airplane, I know that before I ever get on the airplane.

There ought to be some way that that can be improved, because it is there and they are accommodating the public, and they are making the public mad because they are late. When I set a schedule, I like to keep it. Now I am saying: I will be there if I can make it. That is pretty tough, because a lot of people depend on you being there. We have a meeting of some importance and we are trying to work out projects and programs.

It gets very frustrating when you set a time and you walk downstairs and, for the first time, you would have seen this board up there saying five flights or six flights leaving at the same time, and you know you are going to be a half an hour late.

Mr. **Sheehan**. Senator, could I make a comment on that?

Senator **Ford**. You sure can.

Mr. **Sheehan**. I would like to gratuitously add to what some of the previous panelists had given to the answer from Senator Exon concerning their feelings about whether they were secure in flying or not.

And let me give you a little bit of my background. Obviously, I fly on the airliners quite a bit. But about 200 hours a year I fly the system myself, both the high altitude and the low altitude system. And I feel quite secure. The only time I get scared is when I scare myself, I guess would be the best way to put it. It is not the system that is unsafe.

But if I could the phrase, I am also secure in the knowledge that I am going to be delayed some time in that flight. It is just like death and taxes: It is going to happen.

The system has not expanded fast enough to accommodate this great glut of air carrier traffic that we received in the wake of deregulation, and the scheduling problems that you talk about have got to be one of the major portions of that problem.

Mr. **Stimpson**. And if we do not move ahead with this modernization, we are going to have a safety problem in the years ahead, no question, as well as an inconvenience problem.

I would just like to add one further thing, and that is you raised an interesting point about this being revenue neutral. A lot of us have worked, as you know, on the unified budget concept, taking it off. And you have expressed some skepticism on the political reality of accomplishing that.

Maybe there is a different window here we could think about, a revenue neutral function 400 or something to help achieve this same end.

Senator FORD. Well, that is interesting, because under the highway trust fund, when we passed that bill, the best estimates we could get from the smartest people tell us that—there is $10 billion in the trust fund now—at the end of that period of that legislation, there will be a billion dollars more in the trust fund than is in it today.

So it will actually collect more over the five year than it expends. So, to me, that is revenue neutral, plus a billion dollars, and that same amount will be consistent throughout the period because it will not dilute. Whatever is coming in we are going to pay for, and in fact we are going to have some more left. That will keep the deficit picture at the same level in the out years through 1991.

We all know that the people that are sending the budget up here do not want to spend that money because it helps hold the deficit down. They have made as many mistakes, and more than Congress has, as it relates to their estimate on what that deficit is going to be—almost a $30 billion mistake for last year.

Now they want to use smoke and mirrors and one-time expenditures, and we have got all kinds of problems. But a tax that is paid on that airline ticket is paid for a reason, and that reason is to give them better facilities, safer transportation, and do it on time. Now, that is what the money is paid for.

I think you find a strong feeling and I think we are being restrained, if you are not going to use it, stop the tax. That would be a mistake, because we need that money in order to do what you gentlemen are asking for this morning.

You have been reasonable in your request. You have not gone out and said, spend it all overnight sort of thing. But you have asked for a progressive expenditure, and that is the way to accommodate the ability of the airports and everything to go ahead in an orderly way and expand.

Mr. STIMPSON. I think we are all on the same track here. We all have in our testimony talked about a trigger tax, cut the tax if you do not spend the money. But I think deep in our heart we all feel the same way you do. We want the system modernization first, and that should be the goal.

Senator FORD. That is right. You gentlemen are mighty nice and I appreciate your bearing with me this morning. I look forward to working with you in the future and hope we can come out with a good package.

[Whereupon, at 11:15 a.m., the subcommittee was adjourned.]

AUTHORIZATION OF THE AIRPORT AND AIRWAY TRUST FUND

MONDAY, APRIL 20, 1987

U.S. Senate,
Committee on Commerce, Science, and Transportation,
Subcommittee on Aviation,
Denver, CO.

The subcommittee met, pursuant to notice, at 9:00 a.m. in the U.S. Court of Appeals Division II Courtroom, Fourth Floor, 1929 Stout Street, Denver, Colorado, Hon. Wendell H. Ford (chairman of the subcommittee) presiding.

OPENING STATEMENT BY SENATOR FORD

Senator Ford. I'm not used to rapping a judge's gavel, but we'll start anyway this morning.

First, I'll have an opening statement and then we'll hear from the distinguished Senator from Colorado, Senator Wirth. We expect the Governor to be here shortly; if not, we'll proceed first to the Mayor.

I'm pleased to begin today's hearing of the Aviation Subcommittee in Denver, Colorado, as we continue our efforts to reauthorize the Airport and Airway Trust Fund and the programs it supports.

On September 30 of this year, the Airport Improvement Program and the National Airspace System Plan will expire. These programs have provided billions of dollars to support the construction of new airport terminals and runways needed to expand capacity, as well as the development of computers and navigational aids, all of which are critical to our air traffic control system.

It is my job as Chairman of this Subcommittee to ensure that legislation to extend the funding of these critical programs is done in a timely and effective fashion.

It is also our job as representatives of the people who pay the eight percent passenger ticket and general aviation fuel taxes, which are deposited into the Trust Fund, to ensure that these programs meet the needs of aviation users and individual localities.

We can best accomplish this by getting outside of Washington and outside the Beltway, and talk with people who must take the programs that we create and put them to work. And there is no better place to see that than in Denver where, because of rapid growth, plans are underway to construct a new multi-billion dollar airport—the only new airport, by the way, currently being planned in this country.

The Adams County airport project is also being considered because of a very real problem at Stapleton International. That problem is noise.

Increasingly, throughout the country, complaints from people who live around airports are resulting in tighter operating restrictions for commercial aircraft, limiting their access to certain hours, with certain types of aircraft. These rules are of great concern to the airlines who want to continue and open-skies policy ensuring a national air transportation system.

Another matter that brings us to Denver is a need for greater effectiveness in predicting and detecting the weather phenomenon known as wind shear. The tragic crashes of commercial aircraft in New Orleans in 1982 and in Dallas/Fort Worth in 1985 have focused national attention on the need for Doppler radar systems such as those being evaluated by the National Center for Atmospheric Research in Boulder, Colorado.

I am pleased to be here today and look forward to hearing from our distinguished witnesses. Coming to Denver provides this subcommittee a firsthand opportunity to talk with the people who are involved in both of these issues.

Senator Wirth, we're delighted to be in your State, and we're delighted that you are here to testify this morning. Would you proceed.

STATEMENT OF HON. TIMOTHY E. WIRTH, U.S. SENATOR FROM COLORADO

Senator Wirth. Thank you very much, Mr. Chairman. You mentioned in your opening remarks the need to predict the weather. I know that in the twelve hours that you have been in Colorado we went from 80 degrees to an extraordinary dust storm to snow, and I can assure you by the end of this hearing that it will have changed once more.

Senator Ford. Well, you're different in Colorado. In most states you have to stay three days to get that kind of weather. Here you can get it in 24 hours.

Senator Wirth. I'd like to welcome you to Colorado into the ranks of the many key people who are working to bring a new airport to the Denver Metropolitan Area.

A new aiport for Denver can't come too soon. Stapleton, as we all know, is currently suffering from what I would call "terminal illness." The terminals' experience on unmanageable traffic problems, long lines, overcrowding, and delays can turn routine travel into a varietal nightmare.

We've all seen the advertisement for an airline which has its hub in Salt Lake City. That advertisement pictures a business executive bursting into a company board room, obviously late for a board meeting. As the executive is removing his overcoat, he blurts out to the irritated faces, "I'm sorry I'm late, but I had to fly through Denver."

Well, Mr. Chairman, with your help and with the help of so many people throughout Colorado, including many who will testify today, that picture will soon change. By the mid 1990's that harried executive will instead be explaining, "I'm sorry I'm late. I should have flown through Denver."

Mr. Chairman, thank you for holding these hearings here in Colorado. For reasons that I will shortly outline, I think it's very important to begin addressing the question of what programs and policies will best meet our national air transportation infrastructure needs.

More specifically, this hearing will help to focus attention on the need for a new airport in Denver, an airport that will have tremendous impact not only on the Rocky Mountain region but on aviation across the nation.

The fact that you have initiated field hearings in Denver underscores this region's importance in maintaining a safe and efficient air transportation system for the whole country.

Denver's Stapleton International Airport was built in 1929. For the last half-century, Stapleton has grown from a small airfield that initially served no more than a dozen brave air passengers in the early days of aviation to today's modern facility now serving more than 30 million passengers each year.

Denver's central location has combined with the state's continued growth in population and commercial importance to make Stapleton the fifth busiest airport in the world. This airport's status as a major "hub" is one of the reasons the FAA predicts that by the year 2000 Denver will be the second busiest airport in the country.

Stapleton's popularity as a major hub is not merely a reflection of Denver's central geographical location in the United States. Denver is also equidistant from Europe, Asia and most other global locations.

Thus, there is growing international interest in Colorado that will inevitably result in increased investment. The City of Atlanta's experience demonstrates the point. After a ten-year period, from 1975 to '85, of international flights flying into Atlanta during that decade, about 800 new foreign businesses located in the area, generating for the region $3 billion in commerce and more than 50,000 new jobs.

Stapleton's hub popularity already reflects the fact that Colorado is a prime destination point for travelers from around the globe. Denver's airport is also more than a convenient connecting point for flights to other cities; Denver is also the destination for more than 50 percent of the nation's annual tourist traffic. In winter months 70 percent of the nation's ski resort-bound visitors will decide to vacation in Colorado.

Stapleton has tried to cope with its popularity by undergoing a series of expansions and improvements over the years, but it is very clear that aviation demands may soon exceed our ability to serve the air traveling public.

In fact, although Stapleton is designed to efficiently handle between 15 and 18 million passengers each year, last year we actually had to serve 34 million passengers, well over the national rate of increase average. By 1995, it is estimated that the city will be expected to serve more than 50 million passengers; and by the year 2020, the FAA is estimating that more than a billion air travelers are expected to rely on airport service in Denver.

This means that in the face of ever-increasing demands and a greater national air traffic burden, Denver has been expected to serve a vital role in world aviation with a facility that is out of date, overcrowded, and much too small for the job.

At this stage in its life, Stapleton cannot simply expand. Overcrowding is a permanent condition that can't be fixed by expansion because of the airport site's small size. State and local leaders from both political parties representing diverse and sometimes conflicting interests have all joined in recognizing the pressing need for a new facility. Some of those who will be testifying today can no doubt speak to the fact that a unique political consensus has emerged in Colorado to support the idea of a new airport.

The FAA has also recognized that Denver is a vital link in the nation's air transportation system. Significantly, as you pointed out in your opening statement, the FAA has made a commitment to assist Denver in expediting the complex review process for approving a new airport. The FAA's foresight in this matter stems in large part from the fact that Denver is the only major city in the country far enough along in planning and political consensus to build a new facility before the end of this century. No other city in the United States is on the threshold of completing the process of a new airport in the 1990's.

So, we are ready to go ahead, Mr. Chairman, and ready to go ahead as rapidly as possible.

A task of this magnitude will require substantial investment. The City of Denver has not shirked its responsibilities in this area. As Mayor Pena will point out later, the city expects to raise a considerable portion of the funds necessary to build the new airport. But federal investment is also necessary, not only because of prior commitments but also because of the federal government's heavy burden of responsibility in regulating air transportation and safety.

The issue of federal investment focuses, as you pointed out as well, on two areas, the administration of the Airport and Airway Trust fund and the need for a long-term authorization bill.

On the first question, the administration of the Airport and Airway Trust Fund, the administration, as you know, has proposed financing 85 percent of the FAA's operational budget with monies that are currently in the Trust Fund.

The Trust Fund will have an uncommitted balance this year of more than $5 billion at the end of the year. And this Trust Fund, as I remember its history as a member of the House for 12 years, was established with aiway-user fees for the purpose of upgrading and maintaining airports throughout the nation. I believe that we should be making sound and solid investments in the nation's air transportation infrastructure.

The purpose of the Trust Fund is not to serve as a back-door method for financing the FAA. We should instead be using Trust Fund monies as originally designed by the Congress to rebuild and improve the capacity and safety of our airports and airways.

It seems to me that the Administration's position suggests that our nation's airports are all in top condition without need for improvements in safety or efficiency. In my view, the Administration's proposal is dangerously short-sighted and literally ignores mounting evidence that airports like Stapleton are seriously overburdened, congested and, therefore, less safe for air travel.

Future conditions can only be expected to worsen unless we take positive steps now to ensure that adequate funding is available for air transportation improvements.

A second federal funding issue concerns reauthorization of the 1982 Airport and Airway Improvement Act. When this Act was passed, Congress initiated a policy that authorized airport improvement funding over a five-year period. In my view this five-year approach made a great deal of sense; it allowed airport managers and planners to develop a long-term approach for capital improvements.

Given the enormous complexity involved in securing airport expansions and improvements, it simply doesn't make sense to authorize on anything less than a five-year cycle. And yet despite clear needs for a longer-term authorization, the administration has asked Congress to approve only a two-year reauthorization of the Act.

I think this is shortsighted, and I think that we in the Congress should enact a longer-term Airport Improvement Program because our airports need long-term projects that will survive well into the next century.

Once again, Mr. Chairman, I want to express my appreciation to you for coming to Denver and for allowing so many spokesmen for our new airport here to testify on behalf of the Denver Metropolitan area, Colorado, and the whole region.

As I said earlier, the people of Colorado are anxious to begin the task of building a new airport. We are all very pleased, therefore, that you have taken time to see the situation at first-hand.

And, once again, we thank you.

And since Governor Romer has not arrived yet, Mr. Chairman, perhaps I might take this opportunity to introduce the Mayor of the City of Denver.

Senator FORD. Tim, before you do that I'd like to ask you a question or two, if I may.

Senator WIRTH. Please do.

Senator FORD. If we continue with the amount that the administration has proposed for the fiscal year 1987, will this new airport ever be built?

Senator WIRTH. I think that it's going to make it very difficult for us, Mr. Chairman. We had a number of the airport people meet with us in Washington and talked with your staff, and talked with Congressman Monetta and the House staff, urging them that we really need a higher level of funding and a longer-term commitment from the administration.

Senator FORD. Well, I know how hard you're working on the Budget Committee to put this in place.

Senator WIRTH. It's a wonderful joy.

Senator FORD. Sir?

Senator WIRTH. It's a job.

Senator FORD. I understand. It's a real joy, isn't it?

But what I'm trying to do here is to take the information back to show to our colleagues, and we must increase the amount over what the administration has requested.

I kind of look at this as revenue neutral, you know. The tax is coming in to the Trust Fund. You spend it out of the Trust Fund. You won't go any further than that.

If you want to go ahead and introduce the Mayor, I'll be more than pleased to let you do that.

Senator WIRTH. Thank you, Mr. Chairman.

I'd just like to note two other points here. As you pointed out, this funding is out of the Airport Trust Fund, which is collectively large increase surpluses and ought to be used. And, of course, we'll probably have the finger pointed at us for "pork barrel," isn't that the word? "Boon-doggle," and all that.

Senator FORD. Well, one man's pork is another man's beef.

Senator WIRTH. That's right, and we're a major beef producers here and we'd like some of that beef. We could get going quickly on building Colorado's new airport out in Adams County.

Mr. Chairman, if I might, at this point introduce my good friend and colleague, Federico Pena, the Mayor of the City of Denver. Mayor Pena, as you know, has done a very effective job at pulling together the concensus on the airport, and I know it's difficult for him to say this, but three years ago we had almost no agreement at all, and we now have the political issues worked out. Mayor Pena has been right on the forefront of all of this work on behalf of Denver and the whole region.

So, it's a great pleasure to introduce the Mayor of the City and County of Denver, Federico Pena.

Senator FORD. Mayor, welcome. Is this Steve Cramer that's joining you?

Mr. PENA. This is George Doughty, our Director of Aviation.

Senator FORD. That's right. I met George a while ago.

Go ahead, Mayor.

STATEMENT OF FEDERICO PENA, MAYOR, CITY AND COUNTY OF DENVER, COLORADO, ACCOMPANIED BY GEORGE DOUGHTY, DIRECTOR OF AVIATION

Mr. PENA. Thank you very much, Senator, and let me first say to Senator Wirth, he has been very helpful as a member of the Congress and House of Representatives in getting us to where we are today, and we are pleased that now in his position in the Senate he is continuing that leadership to insure that Denver and Adams County and the State of Colorado move forward in trying to assist the national air transportation problems.

Sir, let me say that we are delighted that you are here in Denver for the reasons that you yourself stated in your opening remarks. And that is that it is important for those of you in the Senate, in Congress, to be in the communities where we are making decisions at the local level which will impact national policy. And so I congratulate you for taking the time to be here in Denver, and I know that the testimony you will hear today will be very helpful in taking information back to fellow members in the Senate and in the Congress.

I'm not going to tell you much about Stapleton International Airport and its problems, because I think that you're pretty well aware of those, probably from personal experience and from much reading that you have done.

But let me say that we in Denver are taking two steps to insure that Stapleton continues to be what we believe is one of the more effective national hubs in the national air transportation system.

The first of those steps is to insure that Stapleton continues to be a viable airport. We are completing almost $300 million of improvements to Stapleton today. We've opened up a new runway. We have built a new air cargo facility. Major improvements that are being done at the airport today, which you may have had a chance to see, new parking facilities, et cetera.

But I want to emphasize, Senator, that those improvements are short term. They are only intended to make Stapleton viable and competitive until such time as we build a new airport. That is the second step that we are taking.

I can't tell you how excited we are here in Colorado in terms of the new airport. It is going to be absolutely critical to our economy in creating thousands of new jobs for people in the region. And clearly, as you stated in your opening remarks, we are the only city that is building a new airport of this size, and we genuinely believe that it will resolve many of the national air transportation problems which Americans and people around the world are now experiencing.

Now the legislation which you are going to be examining is critical to us in at least three ways. And I want to hit those three points today.

The first is the question of noise. Today at Stapleton, we have about 38,000 people who are subject to noise which, in our opinion, is rather serious. We need to have the assurance that we at the local level have the ability to at least stablize that noise as the airport continues to grow.

For example, in just three years, Stapleton has grown to the fifth busiest airport in the world, 34 million people a year. So our philosophy is to accommodate growth, which we think is important not just to the region but to the national transportation system, but at the same time to strike a balance so that we can deal with the increasing problem with noise to the thousands of people around the airport.

So we believe that the legislation has to give us some flexibility to address that.

We have just completed a very extensive process in cooperation with local communities and the airlines to develop noise procedures and a noise regulation which will prevent the continued increase in the noise problem at Stapleton and allow new runways to be built to serve interim aviation demands.

This noise program will have a minimal impact on airline operations in Denver. We have been careful to balance the needs of commercial aviation with our obligation to provide a quality living environment for our area residents.

Any furture legislation contemplated must continue to allow airport operators like Denver to directly address local noise problems. Denver provides an excellent example of a community capable of promoting growth in aviation and also controlling noise impacts.

Airport operators are quite capable of addressing both these needs in a responsible manner.

The second concern, Senator, as respects noise is noise at its source. The federal government, we believe, must take a stronger role in the regulation of noise at its source. A major effort needs to be undertaken to phase out as soon as possible all Stage II aircraft either by replacement with new aircraft or by retrofitting to meet Stage III standards.

Communities within the vicinity of airports need to have a reasonable expectation that the noise problem eventually will improve and that there is a specific date by which the noisier aircraft will eventually be removed from the fleet. We believe this process should begin no later than 1990 and should end no later than the year 2000.

As I mentioned earlier, Senator, Denver in cooperation with Adams County and other communities has made great progress toward development of the new airport.

It is our intention to begin construction the latter part of 1988-89. Our goal is to have a new airport somewhere by 1992–1993.

Continued and expanded funding from the Aviation Trust Fund through the successor program to the Airport Improvement Program is critical to completing this project in a timely fashion.

You asked the Senator earlier about the importance, and let me address that. We strongly support the joint AOCI/AAAE position with regard to renewal of this program. A five-year program with an adequate funding level is critical for us to be able to do the long-range planning necessary to complete the new airport.

The funding levels proposed by the AOCI/AAAE position provide adequate money from the trust fund to meet the needs of aviation throughout the country and, we believe, to adequately fund the new airport for Denver.

At these funding levels, we are certainly willing to compete with other airports for funds for this project and would not anticipate that it would be necessary to request what is called place-naming or other specific legislation to benefit Denver.

In addition, we think it is important that the Administrator—I want to emphasize this point, Senator—that the Administrator be given the authority to make multiyear commitments of discretionary funds for long-term projects such as the one here in Denver in order that they can be adequately planned and programmed.

Multiyear authority for discretionary funds has not been a part of the AIP program in the past, and we believe it would be extremely helpful to have the assurance that upwards of $100 million dollars annually, for example, would be available to Denver over the five-year construction period for the new airport.

Again, Senator, I want to thank you for the opportunity to present our comments to this Committee. We are pleased that you are here in Denver conducting these hearings. I think you will find today that you can discover every imaginable issue relating to airport-to-airport operations right here in Denver, Colorado, and for that we are pleased that you are here to listen.

Senator FORD. I think you've answered most of the questions that I had on my mind about the airport.

But let me ask you this one that came to mind: How much in Federal airport development funds will be required to complete the new facility in a timely manner?

Mr. PENA. We think somewhere in the area of approximately 20 or 25 percent.

Senator FORD. And the estimate is about a billion and a half?

Mr. PENA. That's correct.

Senator FORD. So that you'd look to the Federal Government or the Trust Fund for about 25 percent of that?

Mr. PENA. That's correct.

Senator FORD. And you'll be making up the remaining 75 percent with state and local funds?

Mr. PENA. Essentially——

Senator FORD. With a bond issue or whatever?

Mr. PENA. That's correct, yes, sir.

Senator FORD. You talked about making multiyear commitments. I see the Governor here. When I was Governor, we would give a letter of credit that they'd start on airports that we'd go the 25 percent, or whatever the percentage was in a second year on a state level. We couldn't do that, but we would give a letter of credit. Now, I don't see why we couldn't do about the same thing with you.

We also have another problem, as Senator Wirth knows too well, under current law if you wanted to go ahead and begin construction, assuming you had some money to spend, there's no guarantee that you'll be reimbursed out of the Trust Fund. We are looking at that in the reauthorization bill; so that if you want to move forward you can. Clearly, some communities are better able to do that than others. We are hoping we can do that.

I don't mind being fussed at if they call me a budget buster, if we get the additional money.

Mr. Mayor, we thank you for your attendance here and your statement, and we look forward to working with you through Senator Wirth.

Thank you very much.

Mr. PENA. Thank you, Senator.

Senator WIRTH. Mr. Chairman, if I might now take the opportunity to introduce another one of the Coloradans who is working so hard to make the new airport a reality. Our newly elected Governor came into office in January after the people of the state had the good sense and good fortune to elect him.

He's begun his term as a champion for the new airport and has acted as a great catalyst in bringing all parties together, and it's a real privilege to have him here, and to introduce our new Governor, the Honorable Roy Romer.

Senator FORD. Welcome, Governor. We are delighted to have you. Glad you came this morning.

STATEMENT OF HON. ROY ROMER, GOVERNOR, STATE OF COLORADO

Governor ROMER. I'm glad to be here.

I am a pilot, so I have lived with airports for 40 years, and I suppose I have landed in every airport in this state more than once. So

I come to the subject not only with personal experience, I have a private plane parked out there still, but particularly in terms of the strategic importance of airports.

I was in London last week talking to the principal officers of Peninsula & Orient Shipping, they're one of the largest in the world, about their relationship economically to this country. And I casually mentioned that the Denver Airport was busier than Heathrow. And they choaked a moment and said, "Wait a minute. You sure?" And I said, "Yes, it is." We used to be the sixth busiest; now we're the fifth, and Heathrow is sixth.

When I was in Tokyo, I made the same comment to the Japanese, that the airport in Denver has more activity, you know, than the International Airport in Tokyo.

Now, that's a very significant statement about the importance of this particular airport. It's a problem and a challenge and an opportunity not only for national transportation but certainly for the West as a regional center. So, therefore, I have had a lot of discussion with people in this state to help all us understand the strategic importance of that airport. And I come at it first from trying to make this nation and this state competitive. We really do have, in my judgment, increasing competition from the rest of the world in terms of our market share. And we have gone to foreign worlds to continually revitalize, remove our economic efforts in ways in which we can keep our competitive advantage.

And, again, the airport is critical. We cannot be all things to all people. I don't think we can compete with the Indonesians in wage rates. But we in the United States can do certain things much better than anybody else in the world. And essential to that is a transportation system that is absolutely first rate. And essential to this state is that new airport relocated and built in a way in which it can accommodate that future which is so very difficult for us to see.

I have been reading about Atlanta just recently having undersized its facility, and that's a very sobering lesson for those of us who are planning a new airport.

And also I know this is one of the few major airports in the next few years that is to be redone and relocated. Therefore, I think both the financial level, and at the state and at the local level, we all have a responsibility to do this one right.

I would hope that we'll do it in a way for the next fifty years when somebody says, "Well, look, how do you really do an airport correctly?" They'll say, "Go to Denver. They did it right."

And I think we're all in this boat. You know, you are, we are locally. Therefore, I guess the first thing I wanted to emphasize at this hearing is the ambsolute importance of our making the right kinds of decisions about that airport economically and also in terms of other qualities of life. Transportation planning is critical. And I guess, therefore, I have said, as a new Governor, I don't think there's any single impact on this state in the next 20 years that will have so much importance to us economically as that airport and the way we do it.

So, therefore, to summarize what I'm advocating is: One, it's important that we do the planning and the sizing of that airport so that it adequately takes care of that dimly seen future.

Secondly, we must do it in a timely fashion. Because of the increasing use of this airport as a part of the national good, I hope we don't have any delays. I think it's going to be very difficult for us all if we have excessive delays.

Three, we really need your help. We're not dealing with just a local asset here. We're dealing with a hub which is now and will become more so an absolutely essential hub in the United States.

Okay. Let me return to the Japanese. When I was in Japan and when you have a minute and a half to communicate to somebody, to a translator, I'd often just go to a blackboard I'd draw a picture of the United States, and I'd say, "We're going to communicate in two ways; one, from satellites, and two, person-to-person through airports." And look at the United States and the East Coast. You've got Boston, New York, Washington, Atlanta. The West Coast you've got San Francisco and L.A. The center of the country in terms of three major hubs, you've got Chicago, Denver, and Dallas. Dallas has more of a regional bent because it's in the South. And you've got Chicago and Denver. I think all of us know the overuse of Chicago.

And so I just really want to underscore that this is a national asset, not just a local one. Therefore, I feel that I could share all kinds of statistical evidence, which I don't want to bother you with to prove the point, but it is such a very, very miniature investment for us all, both national and state.

And I listened closely when the Mayor was testifying as to the degree of that sharing, you know, Federal and local. But I would hope that you and others on the national level can facilitate us to do it with the proper size and the proper time, and the last point I want to emphasize is the proper quality.

And I'd to really spend one last moment on that issue. If I drew a card about how we contain our competitive edge in this nation, we need to use two words very much more in our vocabularly, and that is "quality" and "excellence," both in terms of the work product that we turn out, but also in the style with which we build.

Many multi-national corporations and business activities are going to want to deal with those locations that have real quality in the way in which they are built out, because as we have more mobility and we can locate headquarters or laboratories or facilities like FFC, those decisions are going to be made not just what works but what works with a life-style and a convenience and a quality that I want to associate with.

Therefore, I hope as we build out this airport we will build it with a quality in which the travelers who use it when they go into this facility will say "Hey, they did this right. I'd really like to associate with people who do know how to deal with the environment, and with buildings in a way in which, you know, they really are setting the standards that I want to associate with."

I think it was Winston Churchill who once said, you know, "First we shape our buildings, and then our buildings shape us." And I think that's really true. The way in which we change our environment and the way we build it out really sets the kind of standards and conditions that shape what we value.

So I would hope that as we build this airport we will build it with a style, with great style and beauty. And I think that's an important consideration, in addition to just pure transportation convenience.

That, in essence, Senator, is what I wanted to share with you this morning.

Senator FORD. Well, Governor, you make a very good case. I'd hate to be the lawyer on the other side. But the point you make that not only is it important to this area, but it is of national interest that Denver expand properly. I assure you no one works any harder toward that than the man to your left, and I intend to work with him.

We have the problems that you have, and it's the budgeting, with its need for establishing priorities. I think no priority is more important than our air transportation and facilities.

There's a growing problem, as you know, about delays and problems of airport capacity. Some areas are not fortunate enough to have those kind of problems. Denver is, and I can say it is fortunate because it's growing. And we need to help the city grow.

Our problem is getting sufficient funding. As I said earlier, I don't know whether you were here or not, I look at the Trust Fund as being revenue neutral. When we spend something out of it, there are always funds coming in. We charge the passengers eight percent, and we're not spending what they expect for that type money—better facilities, safer airways—all those things. If you're not going to spend it, why charge passengers?

We do have a surplus, over $5 billion now. And the administration has asked for AIP funding of about $1 billion, and we intend to try to spend quite a bit more than that.

I think your plea this morning will be helpful, and I intend to see that our colleagues at least read your testimony. I think your interest will come through.

Now, if you have some testimony that you'd like to leave——

Governor ROMER. I would like to leave some.

Senator FORD [continuing]. We'd be glad to put that in the record.

Governor ROMER. I appreciate it very much.

Senator FORD. Thank you very much. We're pleased that you'd take time, and, Governor, that indicates the importance of the project.

Governor ROMER. Thank you.

[The statement follows:]

STATEMENT OF HON. ROY ROMER, GOVERNOR, STATE OF COLORADO

Thank you, Tim. Let me begin by welcoming Senator Ford and the staff of his committee, the Senate Aviation Subcommittee. I'd also like to welcome the representatives of the Federal Aviation Administration who came out from Washington for this hearing today. To all of our out of town guests—welcome to Colorado. I am glad you recognize the importance of seeking information and opinion "outside the beltway," as you Washingtonians put it.

As a pilot, I have a personal interest in airports and air travel. However, I'm not speaking here today as a pilot, but as a governor who recognizes how vital an airport adequate to our present and projected needs is to the economic well-being of Colorado and its successful future development.

Look at the substantial economic impacts of Denver's present airport, Stapleton International. Stapleton directly creates 21,000 jobs for Coloradans. Overall, it is estimated that 140,000 of our citizens owe their jobs, either directly or indirectly, to the airport.

The airport is a champion revenue generator for state and local government. In 1985, firms dependent on airport activity paid $14.1 million in state taxes. Individuals linked to the airport contributed another $46.7 million.

Look at the airport's impact on one of Colorado's most important industries—tourism. The airport directly or indirectly results in 48,900 jobs in the tourism industry, generates $571.9 million in personal income, and $892.4 million in revenue.

The new airport we are planning to build will substantially increase the economic benefit of air travel to our state. With the new airport in place to accommodate projected increases in traffic, firms directly dependent on airport activity will pay state taxes of $18.6 million in 1995, $21.8 million in 2000 and $28.9 million in 2010. Likewise, individuals will pay $54.8 million in 1995, $60.4 in 2000 and $73.5 in 2010.

Recently, I've been paying a fair amount of attention to Colorado's potential to do business internationally. As many of you know, I just returned from a week-long trip to West Germany and London accompanying a delegation of Colorado business and government leaders. Our purpose was to explore opportunities for businesses in Germany and the U.K. to invest in Colorado and to get those pale English folks to come and enjoy our Colorado sunshine, skiing and fishing.

Direct Denver-London air service will be inaugurated in a few weeks, and we are negotiating for more international routes—with Mexico, Western Europe and other destinations. A new airport is important to our efforts to become a hub for international flights. A new facility with longer runways, fewer delays and exceptional facilities will substantially improve the climate for international air service.

Expanded international service inevitably leads to closer trading ties. For example, the number of international corporations with facilities in the Atlanta area stood at 150 in 1975, before Hartsfield Airport was expanded. After completion of the new airport, the number of international offices rose to 966.

All these numbers tell us government officials that our airport is an economic resource. Our citizens recognize this too. In a recent survey, 90 percent of the people polled rated Stapleton as important to them and their communities in terms of jobs and business activity.

In the same survey, a substantial majority of the people polled agreed that it was important to build a new airport. This is evidence that there is a consensus that a new airport is vital to economic development and must be completed as quickly as is feasible.

The consensus extends to government leaders and to the business community as well. Officials of Denver, Adams County and other local communities are to be commended on their cooperative approach to working out land use and other issues so the local squabbles will not interfere with the building of the airport. Senator Wirth, I understand, was instrumental in setting up this hearing today. He clearly recognizes the importance of a new airport to Colorado as a whole, as do the other members of Colorado's congressional delegation. They have pledged to do all they can in the federal arena to see that the airport gets built.

I also reiterate my own support and that of state government for the project. I am behind a new airport one hundred percent and plan to help in any way I can.

Let me describe two concrete examples of what the state is doing to help facilitate the new airport. Because the FAA has agreed to allow a ground-breaking procedure for formulation of the required environmental impact statement, the assessment of environmental impacts is on a fast track. Under this consolidated procedure, state agencies with permitting authority will be called upon to promptly conduct their evaluations. A special interagency working group has been formed to expedite and coordinate the various permitting agencies' activities.

To involve the business community, I have, as a part of my economic development initiative, convened the Airport Area Task Force, a blue ribbon group composed of Denver and airport officials, other local government representatives, state officials, and representatives from the real estate development, investment and legal communities to help forge the public-private partnership that will facilitate building the new airport and ensure its quality and the quality of the area surrounding it.

Finally, I'd like to point out that if a new airport is important to us here in Colorado, it is at least as vital to the nationwide network of air transportation. Denver is a regional hub, and air traffic problems here affect schedules and safety at connecting airports. Without a new airport here in Denver, there will be problems in the future throughout the network. For example, even with substantial expansion and improvements, if existing Stapleton were still our airport in 2020, airline passengers travelling to or through Denver would experience an average delay of 60 minutes or more.

Even now, Stapleton passengers experience significant delays during Instrument Flight Rule conditions, when fewer runways can be used. These delays disrupt the whole air travel network, resulting in delays and dislocations at other airports.

Because of its importance to air travel nationally, the new Denver airport is a matter not only of statewide, but of nationwide interest. As Congress considers the reauthorization of the Airport and Airway Improvement Trust Fund in the coming year, we hope you will allocate adequate federal resources to this vital improvement to the nation's airport system. Certainly, we hope that the subcommittee recognizes the importance of promptly completing an improved Denver facility as against using the Trust Fund for the inappropriate purpose of cosmetically improving the federal budget balance.

Colorado's elected officials, local, state and federal, will work jointly with the Senate subcommittee and its counterpart in the House to assure a fair allocation of funds to the new airport.

Let me conclude with an observation about the main topic of today's hearing. Whatever the committee's determination on the important issue of noise regulation, it seems clear that the real solution to the noise problem is a new airport. Without it, 20,000 residents will be significantly affected by aircraft noise in 1995. With a new airport, further from populated areas, the number of affected residents will be only 250 in 1995, tapering off to essentially zero sometime after 2020.

In sum, my message to you here today, Senator Ford and representatives of the FAA, is that we in Colorado think a new airport is important to get started on as soon as we can. It's important, not just to the Denver area, but to the state as a whole, to the region and to the nation. We in Colorado are united in our commitment to get the airport built, and we will unite in our efforts to see it happen. We also think it makes sense for the federal government to help out too. Let's all work together to create a facility that will be the jewel of our nation's airport system—the best airport ever built.

Thank you.

Senator WIRTH. Mr. Chairman, when we were working with your very able staff in setting up this meeting, I emphasized over and over again that we wanted to show for the record in every other way possible, a quite extraordinary political coalition that has put together the proposal for a new Denver Metropolitan Area Airport.

Part of that coalition the Governor touched upon, stretches all across the State of Colorado to the many small airports who are going to be working with us in the development of this proposal which has such a sweeping influence across the region. And right here at home, it extends into every part of our government.

We have heard this morning from the Mayor of the City, from the Governor of our state, and our third witness this morning is the Chairman of the Board of County Commissioners in Adams County where the new airport will be located. We've had a very difficult political task of reconciling the many different interests between the City of Denver and Adams County, as well as the other surrounding municipalities.

Our next witness, the Honorable Steve Cramer, is due great credit for pulling so many of these interests together. So, it's a great pleasure to introduce to you the Chairman of the Adams County Commissioners.

One might say, Mr. Chairman, that Adams County is historically Democratic. It has three county commissioners, two of whom are Democratic and one of whom is a Republican, and Mr. Cramer is that Republican Chairman. So, he's unusual in many ways.

Senator FORD. They slipped somewhere along the way.

Commissioner, we're delighted to have you and look forward to your statement. You can highlight, if you want to, and the balance will be included in the record.

STATEMENT OF STEVEN E. CRAMER, ADAMS COUNTY, COLORADO BOARD OF COMMISSIONERS

Mr. CRAMER. Thank you, Mr. Chairman. And I also thank Senator Wirth. I'll think about that later.

Mr. Chairman, I'm pleased to testify this morning on behalf of the Adams County Airport Coordinating Committee, which includes Adams County and the cities of Aurora, Brighton, Commerce City, Federal Heights, Northglenn, Thornton and Westminster. The replacement of the poorly-located, inadequate and obsolete Stapleton International Airport is the single most important issue facing Adams County and its cities.

As you are aware, the new air carrier airport for the region will be built by the City and County of Denver. You may not be aware that the land necessary to build that airport currently is located in Adams County, and annexation of the land by Denver will require an affirmative vote by the citizens of Adams County.

The elected officials of Adams County and Denver, after many years of strained relations over airport issues, have worked closely and productively on the development of the new airport since entering into a Memorandum of Understanding in January 1985.

Mayor Pena's farsighted recognition of Adams County and its cities as full partners on the location and design of the new airport have placed the region on the verge of an achievement most thought impossible only a few years ago.

The Federal Aviation Administration last week formally announced the establishment of a Denver Airport Development Office, responsible directly to the Regional Administrator in Seattle. This step should enable the FAA to devote the necessary attention to the new airport project and to help solve problems before they become unmanageable. We look forward to working with the new office toward our mutual goal.

While we applaud the FAA's actions with respect to the formation of this office, the agency must recognize that more is required. Successful completion of this enormous challege will require continuing cooperation from the FAA, as well as from the Federal Government generally, which is equal to that of Denver's with Adams County.

As I stated earlier, an affirmative vote in Adams County will be required for Denver's annexation of the land necessary for the airport. Adams County will not approve this annexation unless its leaders and voters have confidence that the airport proprietor will protect surrounding communities from noise and that the FAA will establish and ensure the permanence of acceptable flight procedures in the environs of the new airport. These procedures must be established at the earliest possible date in order for our citizens to understand the operation of the new airport and thereby make a reasonable judgment on the acceptability of the airport.

We also recognize that flight procedures from time-to-time may need to be altered; at a minimum, however, a system must be established which will ensure meaningful participation of Adams County in any changes in procedures and the maintenance of equivalent protection.

Lastly, I cannot overemphasize the importance of FAA's cooperation with and support of Denver's efforts to reduce noise effects from the existing airport. The success of this effort will not only improve the relations with the citizens now directly affected by airport noise, but also will establish the favorable climate necessary to approve the new airport.

Denver has been working diligently to implement a number of noise mitigation measures, including working with the FAA on increased use of the preferential runway system and improved flight procedures. In June a new noise abatement rule will become effective. This rule has been designed to place a ceiling on overall noise at the airport without unduly disrupting operations or creating unreasonable burdens on air carriers. We believe the FAA's cooperation in the implementation of this rule will demonstrate its commitment to working with Denver and its surrounding communities to control noise.

This will be the first major new airport to be built in America since the enactment of the National Environmental Protection Act, and it may well be the first of a new generation of airports required by the changes in air transportation service which deregulation has occasioned. It is an opportunity for the FAA to demonstrate with its policies and its actions that it can help build and operate airports in an environmentally sound manner, and it is an opportunity which must not be missed.

Mr. Chairman, we recognize the importance of a new airport for the Denver area, the State, the Rocky Mountain Region and, indeed, for the national air transportation system. We also recognize the economic growth potential for Adams County which this new airport will create.

At the same time, it is our duty to the citizens of Adams County to make certain that the project is constructed and operated in a manner not detrimental to our quality of life. That is why we must have the cooperation of both Denver and the FAA in the development of this airport. I am confident that with that cooperation we will succeed.

Senator FORD. Thank you very much, Commissioner. You state your case very well, as others have, too.

Let's look at noise. Is it an ordinance that will trigger in early June?

Mr. CRAMER. New noise regulations for the airport, yes.

Senator FORD. Okay. And now is that an ordinance of the County, the City, or what. Is it a regulation put out by the airport?

Mr. CRAMER. A regulation by the airport.

Senator FORD. Okay. So it didn't take a motion by either the City or County to do that?

Mr. CRAMER. No, it was——

Senator FORD. Is it a joint airport board?

Mr. CRAMER. No. It is owned totally by the City and County of Denver. We have worked cooperatively in both arriving at the noise regulations to try to relieve some of the problems that we have in order to appease the citizens who are right now being impacted by the airport.

Senator FORD. Am I correct that you allow planes to land after 10:00 o'clock at night. In Washington after 10:00 o'clock, unless you have a turbo or something like that, you cannot land at National Airport. Of course, that's right downtown.

Mr. CRAMER. No, we do land at all hours of the night. Sometimes we may not be scheduled to land at those hours, but we do land at strange hours.

Senator FORD. What is the noise level at night? Do you have that? Is that 75 decibels, or would that be the average under the new rule for each carrier, and did you take the past two months and average that?

Mr. CRAMER. I believe it's stipulated for six months, but I think——

Senator FORD. I'll get to that in a minute. I think we'll get some testimony here that will probably get into it a little bit deeper.

What kind of financial contribution to this airport do you envision from your group? Have you made any kind of commitment as it relates to the construction of the airport?

Mr. CRAMER. Our commitment is roughly thirty-five thousand acres of land, which is within our county and will have to be annexed to the City and County of Denver. It will be Denver's airport and, therefore, the financing is primarily Denver's responsibility.

Senator FORD. So that your contribution is thirty-five thousand acres?

Mr. CRAMER. Yes. It will still have to be purchased, but we will allow it to come out of our jurisdiction into that of the City and County of Denver.

Senator FORD. That's a pretty good-sized ranch, isn't it?

Mr. CRAMER. It certainly is. About a third of the size of the City of Denver right now.

Senator FORD. Does this include an area for a noise buffer?

Mr. CRAMER. The noise buffer is outside of that, but we are currently in the process of jointly planning the area around it with all of our cities to insure that we will not end up in the situation we have right now at Stapleton, and that is residential properties within the noise contours of the airport.

Senator FORD. All right. Thank you very much, Commissioner. We are pleased that you were here today and testified, and we look forward to working with you in the future.

Mr. CRAMER. Thank you, Mr. Chairman.

Senator WIRTH. Mr. Chairman, I know you are going to your second panel. I just wanted to note that we've now had representation from our Congressional delegation, from the counties of the state, from the city, and from the Governor's office all in, I believe, a little less than forty-five minutes setting an all-time record here.

Thank you very much, Mr. Chairman.

Senator FORD. That's just what you find out when you get out of Washington. They don't talk so much here as they do there.

They just cut right through it and go right on.

Thank you, Tim, do you want to stay with us?

Senator WIRTH. Yes.

Senator FORD. I want to thank GSA for their help in setting up this room today. Two things happened this morning. One, they are allowing cameras in here, and that's a first. And, two, they are allowing me to smoke. I've restrained myself to only one so far, and I've done very well.

We're looking now at the second panel. We have Dale McDaniel, from the FAA, Skip Spensley, Stapleton International Airport, Ben Hirst, Continental Airlines, and Eliot Cutler, counsel, and we'll start the testimony in that order.

STATEMENT OF DALE E. McDANIEL, DEPUTY ASSOCIATE ADMINISTRATOR FOR POLICY AND INTERNATIONAL AVIATION, FEDERAL AVIATION ADMINISTRATION

Mr. McDaniel. Good morning, Senator Ford and Senator Wirth. I am Dale McDaniel. I am the Deputy Associate Administrator for Policy and International Aviation in the FAA.

I welcome the opportunity to appear before you this morning, particularly so in the City of Denver, as many have observed where so much good work and good planning is going on with regard to the provision of a new airport.

I also welcome the opportunity to talk to you about the major issue of aircraft noise and airport noise restrictions. The problem of excessive airport noise continues to plague millions of people living near our airports today. Aircraft noise is by no means a new problem, but has been with us since the beginning of the jet age.

The general perception is that these problems have grown significantly with the passage of time. In fact, in recent years, there has been a significant reduction in the number of people exposed to unacceptable noise levels. This reduction has been achieved largely through the introduction of new, quieter aircraft, which has reduced the total noise impact despite rapid growth in the number of aircraft operations.

Nonetheless, current noise concerns have intensified due to steadily increasing levels of air traffic operations and new and expanded airport facilities and, in many cases, increasing residential development around airports.

The FAA has long recognized the need to reduce aviation noise and has worked diligently to do just that. Congress first gave FAA the authority to control aircraft noise and sonic boom in 1968. A year later in 1969, we imposed strict noise standards for new design of jet aircraft. All aircraft type certified after this rule was issued had to meet what we call Stage 2 standards.

In 1976 for the first time, the FAA issued an operating rule that required the phased removal of the noisiest or Stage 1 aircraft, including 707's and DC-8's from the fleet. Removal of Stage 1 four-engine Turbojet aircraft was completed at the end of 1986. And by the end of this year, the removal of Stage 1, two-engine aircraft will be completed.

In 1977, we increased the stringency of the noise standards for today's generation, or Stage 3, aircraft, such as the MD-80's, 757's and 767's, which are far quieter than the older generation of aircraft.

Despite this significant progress, we are near the end of the gains we can achieve through reducing noise at the source. We do not see any major technological breakthroughs beyond Stage 3 in the next twenty years which will result in significant reductions of aircraft noise.

However, as operators acquire quieter Stage 3 aircraft and retire the noisier Stage 2 aircraft, the area of noncompatible land use around airports will continue to shrink dramatically. By the year 2005, aircraft operations across the nation will more than double. At the same, time the noise-impacted area will shrink by more than 50 percent.

In addition to our regulatory initiatives, the FAA has made available since 1982 $381.5 million for noise-related projects at the airports through the Airport Improvement Program. These funds were used for a variety of noise-related projects, including noise compatibility planning, noise barriers, landscaping to reduce noise, soundproofing, relocation assistance system, and land purchases for noise-control projects.

Such projects would continue to remain eligible for both apportionment and discretionary funding under the legislation that the administration has proposed.

Regulation of aircraft noise at the source and federal funding, however, will never completely eliminate the noise problem. A long-range steady commitment to effective land-use measures is also required. Unfortunately, too many communities have done too little to assure compatible land use around their airports, and this had led to considerable legal and political pressures on local elected officials and airport authorities to artificially restrain the number of aircraft operations at airports.

The courts have ruled that airport proprietors may restrict the use of airports to prevent exposure to liability for damages caused by aircraft noise, so long as such restrictions are justified by the need to respond to a demonstrable noise problem affecting the airport and its environment.

Such restrictions may not be unreasonable, arbitrary, or discriminatory, and they may not create an exclusive right or constitute an undue burden on interstate commerce.

We are extremely concerned with the tendency of some local communities to obtain a quick fix and seek to deal with noise problems through limiting the numbers of operations. We recognize that airport proprietors are often limited in their ability to exercise effective land-use controls, but a constructive means must be found to ensure that the entire burden does not fall by default on aircraft operators.

It is vital to our nation's air transportation system that a proper balance be struck between the legitimate exercise of local authority to ameliorate noise and the need to provide for an efficient air transportation system which meets national needs and objectives.

As we indicated in our testimony at your April 7 hearing, airport capacity, or the lack of capacity, remains the number one problem facing aviation today. We must increase the capacity at existing airports if we are to meet the forecast growth in aviation demand.

However, if the current lack of planning for growth at airports and their surrounding communities continues, noise problems will increase. Aircraft noise and airport capacity are challenges that we must face today if we are to maintain a safe and efficient national air transportation system.

Mr. Chairman, that completes my statement. I'd be happy to answer any questions.

[The statement follows:]

Statement of Dale E. McDaniel, Deputy Associate Administrator for Policy and International Aviation, Federal Aviation Administration

Mr. Chairman and Members of the Subcommittee: I welcome the opportunity to appear before the Subcommittee today, to discuss the problem of aircraft noise and airport noise restrictions. These are issues which warrant the full attention of the aviation community.

The problem of excessive airport noise continues to plague millions of people near our airports today. Aircraft noise is by no means a new problem, having been with us since the advent of the jet age. The general perception is that the problems have grown significantly with the passage of time. In fact, in recent years there has been a significant reduction in the number of persons exposed to unacceptable aircraft noise levels. This reduction has been achieved largely through the introduction of quieter aircraft which has reduced the total noise impact despite rapid growth in numbers of operations. Nonetheless, current noise concerns have intensified due to steadily increasing levels of aircraft operations, new and expanded airport facilities, and, in many cases, increasing residential development around airports. As air carriers responded to a deregulated environment, they adopted the hub and spoke routing system and increased schedule frequencies to attract customers. These changes, in many instances, brought noise concerns to communities which before had not experienced the problem.

The FAA has long recognized the need to reduce aviation noise and has worked diligently to do just that. I would like to briefly cite some of the actions we have taken. Congress first gave the FAA the authority to control aircraft noise and sonic boom in 1968. A year later, in 1969, we imposed strict noise standards for new design jet airplanes. All aircraft type certificated after this rule was issued had to meet what we call Stage 2 standards. In 1976, for the first time, the FAA issued an operating rule that required the phased removal from the U.S. domestic fleet of the noisiest Stage 1 aircraft—including 707's and DC-8's. In 1977, we increased the stringency of the noise standards for today's generation of (Stage 3) aircraft, such as the 757's and 767's, which are far quieter than earlier generations of jet aircraft. We have, also, acted in other areas of aviation noise by specifying noise limits for new-design and new-production small propeller-driven airplanes, by prohibiting sonic booms by civil aviation, by requiring and encouraging safe operational procedures which reduce noise impacts, by extending subsonic noise limits to future supersonic aircraft, and by proposing to regulate helicopter noise. We have also encouraged airport proprietors to develop noise compatibility programs to reduce the impact of aviation noise on residential neighborhoods near airports.

We are near the end of the gains we can achieve through reducing noise at the source. We do not see any major technological breakthroughs beyond State 3 in the next 20 years which will result in significant reductions in aircraft noise. However, as operators acquire quieter Stage 3 aircraft and retire noisier Stage 2 aircraft, the area of noncompatible land use around airports will continue to shrink dramatically. Our analysis indicates that the U.S. aircraft fleet of Stage 2 aircraft will decline from its present 2,367 to 505 in the year 2005. During that same time, the numbers of Stage 3 aircraft will increase from 608 to 3,979. While the total fleet will increase, along with total air carrier operations, there will be approximately a 48 percent reduction in the land area within the Ldn 65 contours compared to 1985.

Some argue that the current fleet should be converted, resulting in a more rapid shrinking of noise impacted land. For example, if a complete changeover to Stage 3 occurred by 1995, the area of land significantly impacted by noise would be decreased by nearly 70 percent compared to 1985. However, this is not without significant cost to the air carriers, estimated to be at least $9.082 billion above normal replacement costs. The FAA would have to very carefully examine the benefits of this and other options in order to balance the large magnitude of costs likely to be incurred.

In addition to our regulatory initiatives, the FAA has made available, since 1982, $381.5 million for noise related projects at larger or primary airports, through our Airport Improvement Program. These funds were used for a variety of noise related projects, including noise compatibility planning, noise barriers, landscaping to reduce noise, soundproofing, relocation assistance and land purchases for noise control purposes. In this regard, I would like to point out that noise projects are fully qualified to receive discretionary funding, in the legislative proposal submitted by Secretary Dole to the Congress on February 12, as long as they meet capacity enhancement or safety and security goals.

Regulation of aircraft noise at the source and AIP funding for noise mitigation measures will never completely eliminate noise problems, since aircraft, even the new technology types, will always make some noise. As many as 700,000 to one million people will remain within 65 Ldn contours once we have exhausted all that aircraft technology can offer. Safe noise abatement operation procedures and, in particular, effective land use around airports are essential. Land use measures must complement noise reduction at the source if we are to reduce the undesirable effects of aircraft noise. Unfortunately, too many communities have done too little to assure compatible land uses around their airports, and this had led to considerable legal and political pressures on local elected officials and airport authorities to artificially restrain the number of airport operations.

The courts have ruled that airport proprietors may restrict the use of airports to prevent exposure to liability for damages caused by aircraft noise, so long as such restrictions are justified by the need to respond to a demonstrable noise problem affecting the airport and its environment. Such restrictions may not be unreasonable, arbitrary, or discriminatory, and they may not create an exclusive right or constitute an undue burden on interstate or foreign commerce. These decisions are based in part on airport grant agreements that require the airport to be open to all kinds and classes of aeronautical uses on fair and reasonable terms and without unjust discrimination.

Federal funding is available to airport proprietors considering airport access or aircraft use restrictions, through the Part 150 process established by the FAA pursuant to the Aviation Safety and Noise Abatement Act of 1979. Such studies are used to develop, through a process involving all interested parties, noise compatibility programs which are subject to review and approval by the FAA. Compatibility studies and programs are voluntary. If an airport proprietor elects to implement a noise compatibility program, it may do so if the proposed measures are reasonable, nondiscriminatory, do not unduly burden interstate or foreign commerce, and are reasonably consistent with the goal of reducing existing noncompatible uses and preventing the introduction of additional noncompatible uses.

A growing number of airport proprietors has used the Part 150 process, while others have consulted closely with us before implementing restrictions. We find, however, that other proprietors have implemented restrictions with little or no prior coordination with the FAA or other airport users having an interest in the restrictions. Some have conducted no studies of either the magnitude of the noise problem, or the impact of the restrictions on interstate or foreign commerce. In addition, some local governments have been very persuasive in supporting airport proprietors to impose airport access or aircraft use restrictions as a means of reducing airport noise.

We are extremely concerned with the tendency of some local communities to seek to deal with noise problems through limiting access. It is ironic that, in some cases, communities which have grown up around airports now are seeking to restrict those airports without which the communities may not have flourished. Airports attract and generate for local communities millions and, in some cases, billions of dollars annually. It is our firmly held view that airports which have benefited from Federal funds should provide service to the public on fair and reasonable terms, and that they may not unreasonably constrain operations. We recognize that airport proprietors are often limited in their ability to exercise effective land use controls but an effective means must be found to ensure that the entire burden does not fall by default on aircraft operators. It is vital to our Nation's air transportation system that a proper balance be struck between legitimate exercise of authority by local communities to ameliorate noise and the need to provide for an efficient air transportation system which meets national needs and objectives.

As we indicated in our testimony at your April 7 hearing, airport capacity, or lack of capacity, remains the number one problem facing aviation today. We must increase the capacity at existing airports if we are to meet the forecasted growth in aviation. However, if the current lack of planning for the growth of airports and their surrounding communities continues, noise problems will continue to increase. Aircraft noise and airport capacity are the challenges we must face today if we are to maintain a safe and efficient national air transportation system.

Mr. Chairman, that completes my prepared statement. I would be pleased to respond to questions that you and Members of the Subcommittee may have.

Senator FORD. Thank you very much, Mr. McDaniel.

Mr. Spensley.

STATEMENT OF JAMES W. SPENSLEY, MANAGER, STAPLETON'S NEW AIRPORT OFFICE, STAPLETON INTERNATIONAL AIRPORT

Mr. SPENSLEY. Thank you, Mr. Chairman, Senator Wirth, Staff.

I have submitted a little bit longer testimony for the record which I'm going to summarize and, a copy of the noise rule.

My job this morning will be to try to explain to you how the noise rule works and then let Mr. Cutler and Mr. Hirst talk about the law. So, I am going to be a little more informal.

I would like to use a couple of charts, if I can do that, step away from the microphone for a minute.

I think you've already heard this morning about the importance of the new airport. To put this noise rule into context, in fact the real solution to the noise problem you've heard already this morning is a new airport. What we are doing now is dealing with an issue, noise, which is absolutely critical to the credibility of the process for the new airport, as well as our working relationship with Adams County. And so we do look at that issue, the noise rule, as an interim solution.

We also, though, as you have heard, are going to be spending almost $300 million to improve the existing facility. One of those needs is for additional runway capacity. We started working on that problem almost three years ago.

One of the things that resulted from looking [illegible] problem and the need for runways was an intergovernmental agreement, which we formed with Adams County addressing how [illegible] deal with the noise issue related to those two interim runways.

Out of the intergovernmental agreement [illegible] a set of noise mitigation measures, among which included [illegible] was called a fleet mix rule, which was originally proposed. As proposed, Senator, that rule would have put a limitation on the number of Stage 2 aircraft that are used at Stapleton. As you know, under the FAA scheme various stages of aircraft are defined as illustrated here showing Stage 1, Stage 2, and Stage 3.

That original proposal would have put a restriction on the number of Stage 2 aircraft using the existing Stapleton facility. At the time we finished the intergovernmental agreement, we took it to our Denver City Council where it was to be ratified. The airlines expressed at that time a concern that they had not had the participation they would have liked in the development of that fleet mix rule, so we took a step back,and we agreed on a six-month process by which we would work with the airlines. We described it as a problem-solving, consensus-building approach. We created a noise rule group, as it was called. We asked the airlines, the ATA, the FAA as an observer, the affected communities, a member of our Denver City Council, Adams County, and cities to be represented.

We met every two weeks for six months and looked at proposals as to how to improve an approach to dealing with noise in the area. What came out of that process is the present noise rule, and I'd like to describe it for you very briefly.

First, rather than using "stages" of aircraft, we adopted an incremental approach to aircraft noise. That is, we looked at each aircraft that was being used by each airline at Stapleton to calculate the noise exposure.

Second, we put a cap on the noise generated at the existing airport by each airline. We negotiated, what you Mr. Chairman were referring to earlier, as a noise cap based upon a two-month average. Actually, we used June, 1986 which was the month of highest noise impact and the month of September of 1985, because the community felt that noise shouldn't have gotten any worse than beyond that date. The City had made an earlier commitment to not allow significant increases in noise. So we took the average of those two months, essentially, and said, "That's our noise cap."

We agreed, by the way, before we started this process that the objective was to put a cap on noise, and that we would pick a base period no later than July of 1986.

We allocated noise exposure back to the airlines based on what they contributed in the past. We examined several approaches to allocating noise to the airlines. There have been several schemes used around the country. We felt that the most equitable approach was to allocate noise exposure on the basis of what noise the airlines had produced in the past.

We created a buy-sell provision. That is, we created a market provision, if you will, in this noise rule so that if one airline had more noise exposure allocated to them than they needed, or they were operating more quiet aircraft, they could sell that noise exposure increment to another airline.

We were very cognizant of trying to avoid a situation which produced an undue burden on the airlines operating at Stapleton.

Third, we established a diminimis level below which an airline would not be subject to the rule. We established a threshold noise level. This level was equivalent to four flights of the noisiest Stage 2 aircraft per day. At the time we started there were 14 major commercial operating airlines at Stapleton. By the time we finished, the noise rule there were 12. Some of them have merged.

The next chart shows the distribution of noise exposure at the existing airport from those half a dozen airlines that are below the threshold level. They represent less than three percent of the total airport noise. Thus, they are basically unaffected by the rule so long as they generate noise below the threshold level.

The remaining noise distribution, as you can tell, is between United and Continental.

We also provided in another section of the noise rule for a two percent tax on the noise that is bought and sold. As we have done in the air quality area, if you buy or sell noise, the two percent tax is imposed. In effect, this creates a noise reduction capability in the rule.

Finally, we provided for what we call supplemental-related landing fees for enforcement of the rule. Under this rule, we have exempted government-owned aircraft, international flight operations, and cargo operators, although we are working on a separate cargo rule which will become part of the noise mitigation regime at Stapleton.

Finally, let me explain briefly why we feel the rule is reasonable and flexible. Because we had this group of diverse interests represented on the noise rule group, we tried to balance the concerns of the community as well as the airlines. Compliance under this rule by the airlines can be achieved in several ways.

First, because of the Ldn metric used in the rule, nighttime flights are penalized ten times in terms of noise exposure. So, Senator, if a flight lands or takes off after 10:00 o'clock PM or arrives or takes off before 7:00 in the morning, it's penalized ten times its noise value under this rule.

Therefore, an airline can change its schedule from a night flight to a daytime flight and gain ten times as many flights. In other words, one nighttime flight is equivalent to ten daytime flights in terms of noise exposure.

Second, airlines can substitute aircraft. If they have a noisy Stage 2 aircraft, and they want to put in a quieter Stage 2 aircraft, they can gain more flights or operations.

Third, I mentioned the buy/sell provision. They can buy additional noise if they need it.

And then, finally, we think we have a rather realistic operating threshold level under which a new entrant can come into the market, operate at Stapleton four flights a day of the noisiest Stage 2 aircraft, or for that matter it could be 20 flights a day of a quieter aircraft, or even 200, depending on what aircraft they're using, and still not be subject to the rule.

Finally, let me state again that the real solution to noise is going to be the new airport. We are planning to purchase up to 25,000 acres, that's 35 square miles of land, for the new airport itself. In addition, we are planning to purchase the residential development rights on another 20 square miles of land to avoid residential development encroaching upon the new airport.

We are working out this approach with Adams County and with our City Council. Hopefully, we won't need a noise rule like this for the new airport.

Senator, I'll stop there, and answer questions.

Senator **Ford**. Very good. We'll get around to you.

[The statement follows:]

Statement of James W. Spensley, Stapleton's New Airport Office

My name is James W. Spensley, and I am the Director of Stapleton's New Airport Office for the City and County of Denver. The New Airport Office is responsible for coordinating the overall planning and development of a new airport for Denver and the metropolitan area.

I appreciate having the opportunity to testify this morning and to describe the new "Noise Rule" for Stapleton International Airport which was adopted in January, and will become effective on June 5, 1987. This Noise Rule is the product of a cooperative effort among many interested parties in this issue. But before I describe the Rule and the process that produced it, I would like to put this issue in the larger context of the efforts underway to build a new airport for the Denver metropolitan area.

The recent history began in 1974, when the Denver Regional Council of Governments (DRCOG), recognizing the ever-increasing growth of air transportation demand in the Denver metropolitan area, undertook a series of studies to examine alternative sites for a new airport. After nine years of studies, DRCOG voted in 1983 to expand the existing Stapleton International Airport onto the Rocky Mountain Arsenal. Shortly thereafter, representatives of Adams County and its cities who had opposed expansion of the existing facility approached our then newly elected Mayor Pena to see whether a better resolution to the issue might be found. The decision to expand onto the Rocky Mountain Arsenal was opposed by Adams County and its cities on account of the noise impacts from operations at the existing airport on their communities to the north. Moreover, expansion of the existing facility onto the Arsenal would bring the noise closer to those communities and their developing areas.

In March, 1984, Mayor Pena agreed to enter into negotiations with Adams County and its cities to explore alternatives to the DRCOG decision. At the direction of Mayor Pena, we established the New Airport Office to assist in those negotiations and to coordinate the overall planning effort with other City departments, state and federal agencies, with the goal of building a new airport to replace the existing Stapleton facility. After eight months of negotiations and technical analyses, the City and County of Denver and Adams County and its cities signed an historic agreement, referred to as the Memorandum of Understanding, which set forth the proposal to build a new facility just east of the Rocky Mountain Arsenal. In addition, it contained a number of important agreed-upon principles by which a master planning effort would be undertaken to plan the new facility, including an environmental assessment, and an agreement that the new airport would be annexed to the City and County of Denver.

Shortly after the Memorandum of Understanding was signed, the City and County of Denver selected a team of experts who began the planning for the new airport in July, 1985. A fast-track planning schedule was developed to complete the master plan and environmental assessment within two years from the time it began. We are today within six months of completion of that effort, and will turn over the master plan and environmental documents to the FAA this fall for their preparation of an environmental impact statement (EIS) in accordance with the National Environmental Policy Act of 1969.

One of the key elements in the fast-track planning schedule is the preparation of the EIS by the FAA within a timeframe of ten to twelve months. This schedule was developed cooperatively with the FAA and reflects a realistic but aggressive timeframe for completion.

Another significant aspect of our cooperative effort is the agreement that the new airport will be annexed to the City and County of Denver. Denver and Adams County worked together to introduce legislation which was enacted by the Colorado legislature in 1985-86 to amend the existing annexation statutes to allow for the initiation of an annexation process by an intergovernmental agreement between Denver and Adams County. Although a date for the annexation election has not been established yet, it is our mutual desire that such an election be held as soon as possible. Once a successful annexation has been achieved, and the FAA approves a final EIS, the airport can begin construction.

Although an agreement on a new airport and a process to achieve that end was achieved, the existing Stapleton Airport remained a problem with respect to assuring that adequate facilities both in the terminal as well as on the airfield could be provided until the new airport was constructed. To that end, the City and County of Denver had proposed for a number of years the construction of an east-west runway on the southern tier of the Rocky Mountain Arsenal to provide additional airfield capacity and to reduce substantial delays to the airlines during bad weather. This proposal caused concern among many because it was viewed as an opportunity for more and new noise at the existing facility. Nonetheless, Denver proposed the project to the FAA who undertook the preparation of an EIS for this project beginning in the summer of 1984. In the midst of the preparation of that EIS, George Doughty, Director of Aviation at Stapleton International Airport, recommended a supplemental solution which was to construct a short north-south runway for commuter and general aviation aircraft on the existing ariport site. This new short north-south runway, if constructed along with the east-west runway, would provide additional airfield capacity and further reduce delays.

Because Adams County and its representatives were skeptical about the noise impact of the two proposed runways, discussions were initiated in early 1986 to address their concerns. Representatives of Adams County presented Denver with a letter in March, 1986, which requested a further agreement with Denver on certain noise mitigation measures. Among those measures, a noise insulation program and a noise "fleet-mix rule" were proposed. In early April, 1986, several meetings were held with representatives of Adams County and the airlines to discuss the noise mitigation measures proposed by Adams County. The airlines indicated early on that they were going to oppose the noise insulation program as well as any noise fleet mix rule. It was apparent to Denver and Adams County that the airlines were also not prepared to discuss any compromise dealing with a noise fleet mix rule.

Because the proposed runways were badly needed, Denver had to move forward. An intergovernmental agreement between Denver and Adams County was negotiated which, among other things, addressed their noise concerns. First, Denver agreed to limit the noise emissions from aircraft using the new short north-south runway. Second, an aircraft run-up area would be constructed with a noise barrier in order to minimize noise impacts to the surrounding communities. Third, prior to the operations of the new north-south runway, a "rule or other enforceable mechanism" referred to as the "Aircraft Noise Limitation Program (ANLP)" would be adopted and implemented to govern the levels of noise emitted from aircraft using the existing Stapleton facility, and a supplemental noise-related landing fee would be imposed for any violations thereof. Fourth, Denver agreed to install a noise monitoring system which could measure the noise impacts from the existing facility. And finally, a noise insulation program would be implemented for all schools and churches which were exposed to noise levels of 65 Ldn or more, and for all residential units which were exposed to noise levels of above 70 Ldn.

Once the intergovernmental agreement between Denver and Adams County was finally executed on June 25, 1986, the agreement was sent to the Denver City Council for ratification. The City Council responded to a request for a public hearing on this agreement at which the airlines objected to the noise mitigation provisions; in particular, the proposed noise fleet mix rule. They argued that they had not had the opportunity to participate in the development of that rule even though they were invited to participate as early as the beginning of April, 1986.

The Council then requested that Denver and the airlines attempt again to work out some agreement. We proposed that a Noise Rule Group be formed starting in July, and devote the next six months to revisiting the issue of an ANLP rule. At the public hearing before City Council, it was agreed that the ANLP should meet the objective of setting a cap on noise at the existing facility. It was further agreed, that the noise cap would be for a period of no later than July 1, 1986.

Our approach to reaching some new agreement was to invite a broad group of representative interests to participate in this process including representatives from the airlines, the cargo operators, the affected communities, the FAA, the Denver City Council, Adams County and its cities, and the Air Transport Association. The Noise Rule Group agreed to meet every two weeks and to explore various alternatives to the development of an ANLP rule. The first several meetings of the group were used to achieve an agreement on the objectives and criteria which would be used through the remainder of the process to evaluate and finally select an ANLP rule.

Our approach was one of problem-solving and consensus-building among the participants. We asked all participants involved in the effort to provide information as necessary so that analysis of the various alternative approaches could be accurately accomplished.

The airlines made several proposals during the six-month process of which many were adopted in the final ANLP rule. For example, United Airlines wanted the ANLP rule to include consideration of their "quiet departure procedure". United demonstrated this procedure for members of the Noise Rule Group, both on paper and in their aircraft simulators. Although there was general agreement that this quiet departure procedure was not effective in reducing the noise for all residents living around the airport, it did make a significant contribution to the reduction in noise, and therefore was adopted in the calculations of noise exposure under the ANLP Rule. Continental Airlines made several suggestions for a noise-limiting approach which would govern the use of Stage 2 aircraft. Because Continental Airlines had a larger percentage of Stage 3 aircraft, their approach focused on giving credit to any airline with a large percentage of Stage 3 aircraft and limiting the use of Stage 2 aircraft at certain times. Upon examination, however, their approach did not meet the goal of capping noise at the existing airport inasmuch as their proposal did not compensate for an increasing number of Stage 3 aircraft that would continue to contribute noise. The airlines also made suggestions for changing the definition of "nighttime operations". We felt that this suggestion would weaken the noise approach since it would make it incompatible with the recognized Ldn noise approach used by the FAA and other federal agencies.

At the end of the six-month ANLP process, and after dozens of draft rules and approaches, we felt a general agreement emerged for the approach which used the Ldn metric as the basis for an ANLP rule. By the end of December, 1986, a draft ANLP rule was proposed by Denver for implementation. United Airlines expressed a concern about several provisions of the proposed ANLP rule including its implementation date and the allocation basis for distributing noise among the airlines. These matters were further negotiated with United Airlines and representatives of the affected communities until a compromise version was agreed upon. This version of the ANLP rule was eventually adopted by Denver as the rule to be implemented. On the other hand, Continental Airlines objected among other things to the general approach of a "Noise Rule" for a major hub airport like Denver and preferred their earlier suggestion for a "contract approach". Although a contract provision was allowed for in the ANLP rule in response to Continental's suggestion, it was clear that this would not satisfy their concerns.

The adopted ANLP rule places a cap on daily average noise for the airport based upon the average of the total airport noise generated in the month of September 1985 (the community representative's choice of a base month) and June 1986 (the airline representative's choice of a base month). Each airline is allocated a portion of the total airport noise based on its past noise contributions. Air carriers must then operate within their individual allocations as set forth in air carrier noise certificates issued by Stapleton. The ANLP rule contains enforcement provisions that will assess supplemental noise-related landing fees on airlines that do not operate within their respective noise exposure allotments. Under the enforcement provisions, it is possible to exceed the noise cap for one month if a reduction of noise is seen for another month.

The six-month enforcement periods begin January 1 and July 1 of each year, except for the year of implementation, 1987. The airport noise office will collect data on flight schedules and the type of aircraft flown from the Official Airline Guide (OAG) for each enforcement period in order to calculate the noise exposure of each airline. The Director can then assess supplemental noise-related landing fees for violations that occur. No on-site noise measurements are necessary in order to determine compliance.

The airlines subject to the ANLP rules at Stapleton include American, Continental, Delta, Eastern, TWA, and United. Airlines that generate an average daily noise exposure level of 56.88 decibels or less (approximately 4 flights a day of Stage 2 aircraft such as the Boeing 727-200) are exempt from the rule since they generate very little of the total daily noise. Other exempt aircraft operations include government-owned aircraft, air cargo carriers, and aircraft providing international service.

Night flights, scheduled between 10:00 PM and 7:00 AM, are penalized under the ANLP rule. One aircraft operation at night is equivalent to ten operations during the day. Therefore, airlines which elect to reduce operations during the sensitive nighttime period, will receive a ten to one benefit.

The ANLP rule, consistent with federal law, prohibits all Stage 1 aircraft from operating at Stapleton after December 31, 1987. The rule also states the City's intention to make future reductions in the noise generated by aircraft at Stapleton. If the new airport to replace Stapleton is not operational by December 31, 1994, the base noise level (75.41db) may be decreased by three percent. If the new airport is not operational by December 31, 1999, the base noise level may be further decreased by two percent.

Compliance with the ANLP rule can be achieved in several ways. First, an airline can substitute quieter aircraft for those being used in order to reduce their noise exposure. Second, the ANLP Rule contains a buy/sell provision for the noise allocated among the airlines such that an airline can purchase "noise rights" from another airline in order to meet their allocation. Third, because the ANLP utilizes the Ldn noise metric approach, an airline has the flexibility to shift a nighttime flight to a daytime flight and gain ten times the number of operations for the same amount of noise exposure. And finally, the ANLP Rule contains a threshhold noise level which is defined as a diminimis level of noise under which aircraft operations are not subject to the ANLP limitations. Of the twelve major airlines operating at Stapleton Airport, half of the airlines would fall under this threshhold level, and are thus not subject to the noise allocations.

The technical consultants who supported the Noise Rule Group, conducted an analysis of the actions each of the six airlines subject to the Rule would have to take in order to comply with the Rule. Comparing the noise exposure from operations by those airlines during the month of December, 1986, with the limitations set forth under the ANLP rules, the airline most severely affected by the noise limitations could comply by simply moving two nighttime flights to daytime flights out of their total of 220 flights per day. Other airlines less affected by the noise limitations could make minor adjustments by substituting one type of aircraft for another within the same class. We felt that this preliminary evaluation demonstrated an acceptable balancing between the interests of putting a limitation on the increase of noise at the existing airport and maintaining a strong competitive environment for the airlines at Stapleton.

In closing, I want to underscore the fact that this ANLP rule adopted by Denver is regarded as an interim measure at the existing airport until we can move to a new airport. It is our plan that the new airport will be sufficiently protected by buffer lands and other legal agreements so that this type of noise rule will not be necessary. We have had extensive discussions with representatives from Adams County concerning the need to protect the new airport from encroachment by residential development. We have reached some tentative agreements in that regard and are hopeful that effective legal measures can be undertaken to accomplish that goal.

As has been stated by others, we are deeply concerned about the Congress preserving the right of local proprietors to issue such noise regulations. In the case of our planning for a new airport, our ability to deal with the noise problem is paramount to the success of this overall effort. We have recently initiated steps to assure that our ANLP rule does not have unintended impacts upon the airlines or upon interstate commerce. We have communicated our desire to the Federal Aviation Administration to sit down and discuss how we can make our noise mitigation measures more compatible and thus less of a concern to the airline industry. We have also initiated efforts through the Airport Operators Council International legal committee to initiate such discussions with other airport operators. We intent to pursue these efforts in order to assure that our noise limitations have a minimal adverse affect on the airlines operating at Stapleton, and still maintain a viable noise limitation program.

I appreciate the opportunity to present this testimony, and I would be happy to answer any questions.

Aircraft Noise Classifications

Stage I Aircraft

(Prohibited after 1-1-88)

707 aircraft

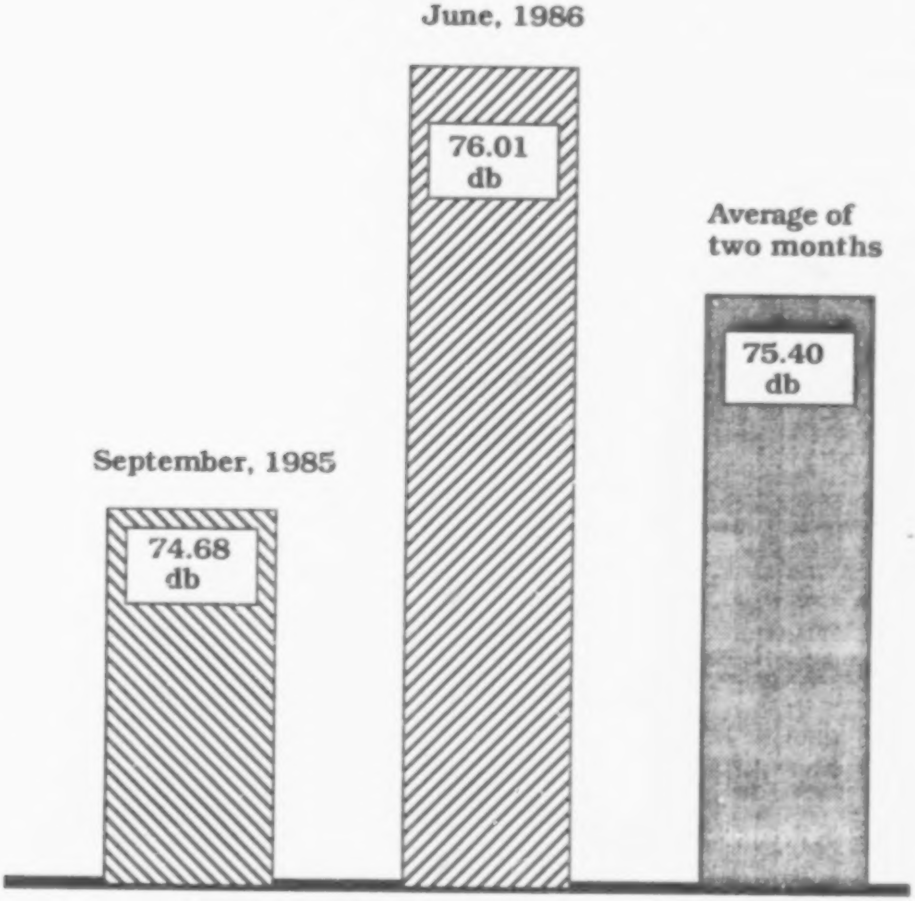
Stage II Aircraft

97.41 db	Boeing 727-200/JT8D-9
92.0 db	DC9-30/JT8D-15
90.6 db	747-200/JT9D-7A
90.6 db	737-200/JT8D-9

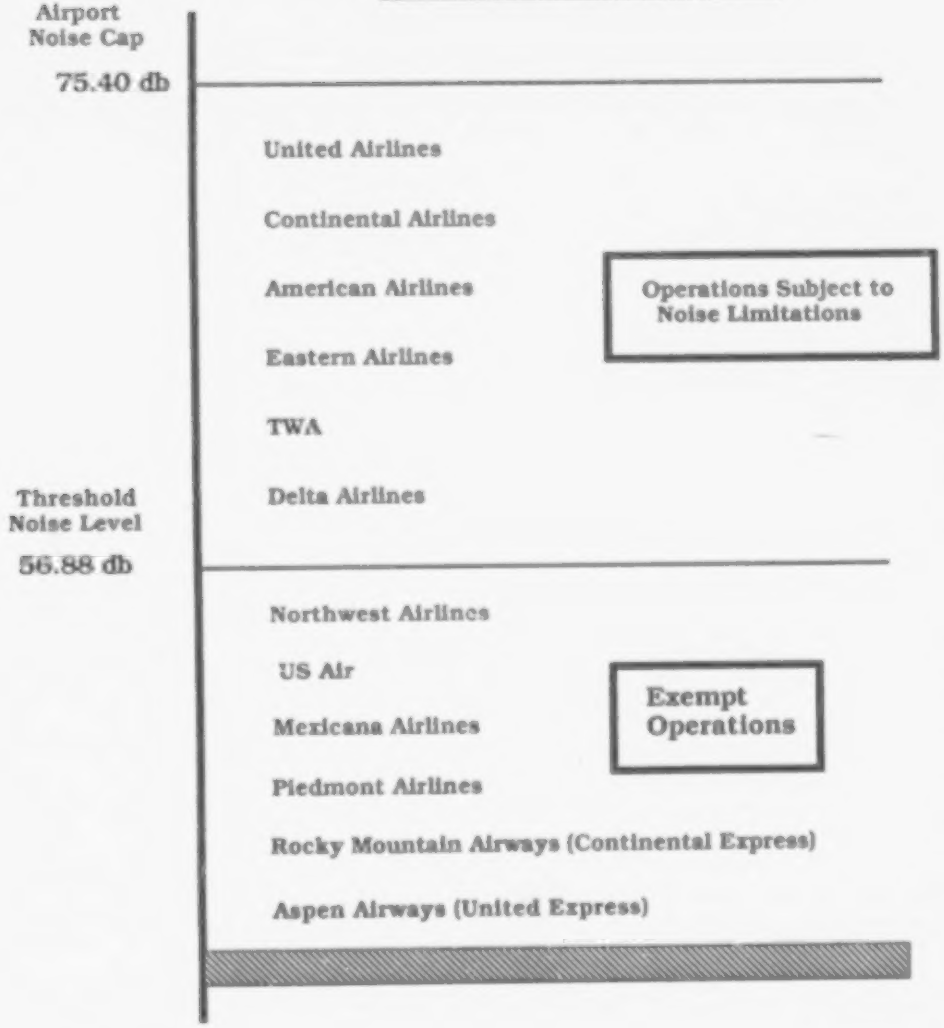
Stage III Aircraft

86.4 db	767/JT9D-7R4D
85.1db	737-300/CFM56-3
82.4 db	CV580/501-13
77.6 db	Bae 146/ALF502R

BASE PERIOD CALCULATION



Noise Rule Application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American Airlines
Eastern Airlines
TWA
Delta Airlines
Operations Subject to Noise Limitations
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Rocky Mountain Airways (Continental Express)
Aspen Airways (United Express)
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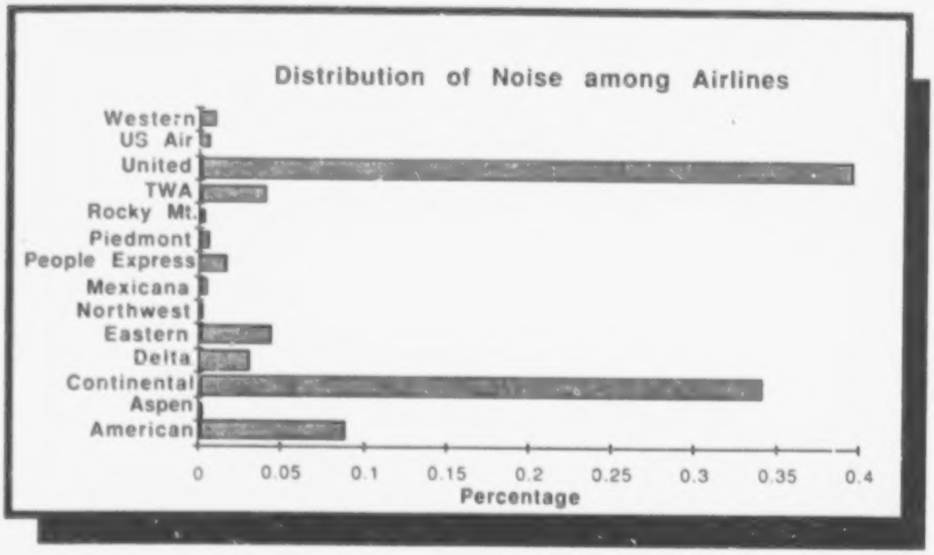

STATEMENT OF BEN HIRST, VICE PRESIDENT AND GENERAL COUNSEL, CONTINENTAL AIRLINES CORPORATION

Mr. HIRST. Thank you, Senator Ford.

We are submitting for the record a written statement which I would ask be printed in its entirety.

Senator FORD. It will be printed in the record.

Mr. HIRST. Thank you, sir.

I must say just at the outset that I am feeling right at home here sandwiched between Mr. Spensley, on the one side, and Mr. Cutler, on the other. It is the position that I've been in for the last six months in attempting to negotiate an acceptable compromise.

Senator FORD. It looks like you're on the end, though; you're looking for exits.

Mr. HIRST. Maybe I will be after Eliot is through.

Certainly no one would deny that the aircraft noise problem is a serious problem for those persons who are impacted by noise, but it's important to remember that the number of people affected is small in relation to the number of people who benefit from the national air transportation system, and that that number, as Mr. McDaniel points out, is decreasing as airlines undertake fleet modernization as a part of the competitive process.

Airlines are purchasing noise-efficient Stage 3 aircraft at a reasonably rapid rate. And, as a result, in Denver, just to take one example, Mayor Pena earlier estimated that approximately 38,000 people live in the 65 Ldn contour in the vicinity of Stapleton. The FAA has estimated that without the new Denver noise regulation that number should decline to about 13,000 in 1990, and to 10,000 if Denver were to open a new east/west runway by that date. So is the result of fleet modernization and the adoption of less intrusive noise mitigation techniques such as the use of preferential runways, preferential departure tracks, and so on.

Despite these favorable trends, Continental is concerned, and other airlines are concerned, about the fact that local governments are increasingly adopting noise restrictions intended to require airlines to use a disproportionate number of Stage 3 aircraft in providing service to their municipality.

These restrictions tend to impact the use of such Stage 2 aircraft as the Boeing 727, which is the workhorse of the commercial fleet; it comprises 40 percent of the commercial fleet. And the 737/200 and the DC-9, which comprise another 29 percent of the commercial fleet, and which are used primarily to provide service to small and medium-sized communities.

The wholesale replacement of these aircraft is not financially feasible for most air carriers or for the industry as a whole. The national fleet of 727's and Boeing 737/200's has a remaining useful life of about 20 years. It's been estimated that a Stage 2 operating ban effective in 1995 would cost the industry about $12 billion.

Indeed, merely to retrofit the 727 fleet would cost an estimate $8.6 million per aircraft, which would cost Continental alone $920 million.

These are very large numbers for this industry, which is not a particularly profitable industry. Last year in 1986, the industry earned merely $1.1 billion in operating profits as a whole; had a net loss of about $170 million. And the profits within the industry are highly concentrated, indicating that only a few firms are truly in a position to undertake accelerated modernization of their fleets. Four firms last year, and newly emerging firms, earned 85 percent of the industry's profits. Those were American, Air-Cal, Delta, Western, Northwest Republic, and U.S. Air Piedmont.

Noise restrictions are crafted by city councils, whose perspective by definition is local. In each case the regulatory objective is to minimize noise in local neighborhoods. No account is taken of the effect of operating restrictions on the national air transportation system. Yet such restrictions will inevitably affect the consumer, the access of small communities to the national system, airline operations, and airline competition.

The local regulatory processes are highly idiosyncratic, both in effect and in methodology. In Boston and Minneapolis and in Denver, for example, these cities have not followed the methodology for measuring noise exposure that was identified as the desirable methodology by the Aviation Safety and Noise Abatement Act of 1979.

Many municipalities have not undertaken a Part 150 study to determine the need for a regulation prior to its adoption, since there is no legal requirement that they undergo the Part 150 process.

In addition, the current generation of noise rules tends to proceed directly to operating restrictions; restrictions on fleet mix, on time of operation, such as curfews, and on actual operations, slot restrictions, without first exhausting less intrusive, less restrictive alternatives, such as the use of preferential runways and departure corridors, as I mentioned earlier, the development of noise run-up areas, land-use acquisition, as Mr. McDaniel suggested, and soundproof.

Each layer of local regulation decreases the efficiency with which an airline can operate, and thus increases airline costs. Any increase in costs experienced by the airlines on an industry-wide basis will ultimately be translated into higher ticket prices. Thus, efficiency costs must be added to premature fleet moderization costs in assessing the impact of local noise regulation.

In addition, local regulations will inevitably reduce the contestability of many city paramarkets involving the regulated point. Again, let me use Denver as an example. The recently-adopted Denver rule allocates the available noise between, largely between two carriers. Continental and United receive 80 percent of the noise available for allocation under the Denver rule.

Including Continental and United, only six airlines are allocated enough noise to operate more than four 727/200 flights per day. Since a carrier operating four or even six 727/200 flights a day is not competitively significant in Denver, most carriers in Denver will be able to compete only by using Stage 3 aircraft.

In our view this will substantially deter new entry into many Denver markets. Noise rules elsewhere, notably at Orange County, and as proposed in Minneapolis, have the same effect of entrenching incumbent carriers.

Among the most serious casualties of this process is likely to be the development of service to small communities. Constraints on the operation of Stage 2 aircraft will force airlines to concentrate their authorized Stage 2 operations in denser markets. Since the aircraft used most frequently to serve small and medium-sized communities are Stage 2 aircraft, the 737/200's and the DC-9's, service linking these communities to the national system is likely to be impaired by noise regulation at hub airports.

While many airports have adopted use restrictions, the process is not yet irreversible, because thus far it has been largely confined to smaller non-hub airports. Denver is the first major hub to adopt a rule which seriously constrains airline operations. If the Denver rule stands, and other hub airports follow this precedent, the effect on the national system, in our view, will be severe.

In our view, the national air transportation system should not be reorganized through a series of ad hoc actions by local regulatory bodies. The FAA should be clearly assigned the responsibility for resolving conflicts between local noise concerns, on the one hand, and the needs of the national system, on the other.

At a minimum, the Part 150 process should be strengthened. A first funding available to the FAA for use in connection with Part 150 applications, in our view, should be increased.

Second, the administrator should be directed to review existing use restrictions and to invalidate fleet mix curfew, slot, and other restrictions affecting airline operations, unless he finds that the regulation in question is justified on the basis that other less-restrictive alternatives are in effect, and that the regulation is necessary to achieve significant noise mitigation.

Third, municipalities proposing to adopt new noise regulations should be permitted to do so only in the context of the Part]50 process. In short, there should be, FAA approval should be a prerequisite to any locally imposed noise restriction, in our view.

Thank you.

[The statement follows:]

STATEMENT OF RICHARD B. HIRST, VICE PRESIDENT—GENERAL COUNSEL, CONTINENTAL AIRLINES, INC.

My name is Richard B. Hirst. I am Vice President—General Counsel of Continental Airlines, Inc. I am pleased to be here today on behalf of Continental to discuss the serious threat to our national air transportation system created by the growing number of noise-based restrictions on air carrier operations imposed by local airport authorities.

INTRODUCTION

Denver is a particularly appropriate site for a discussion of locally-imposed noise restrictions. As the Committee is aware, Denver has recently adopted an Aircraft Noise Limitation Program which places a ceiling for the indefinite future on the amount of noise which certain air carriers can produce at Stapleton International Airport. Denver is not the first airport to adopt a noise-based restriction on air carrier operations. Smaller airports such as Burbank, Orange County, Long Beach, and Long Island MacArthur (Islip) previously either have restricted the types of aircraft that can be used or have imposed noise budgets on carriers operating at the airport. In addition, Massport has enacted a complex three-tier noise rule for Boston's Logan Airport. The Massport rule, which took effect in July 1986, is designed to force carriers to use a disproportionately large percentage of their stage 3 aircraft at Logan.

The recently adopted Denver rule is of critical importance not only because it adds to the existing number of local restrictions but because it is the first major hub airport to impose a noise ceiling capping air carrier activity. As the nation's seventh busiest airport in 1985, Stapleton's importance to the efficient functioning of the national air transportation system is difficult to overstate. Denver's central location as a connecting hub for the Western United States is expected to result in rapid growth in the number of passengers enplaned for the foreseeable future. The Federal Aviation Administration (FAA) predicts that Denver will be the fastest growing of the nation's top 10 airports for the remainder of the century and will be in a virtual tie with Dallas/Ft. Worth as the second busiest airport in the United States by the year 2000. *FAA Aviation Forecasts,* Fiscal Years 1987-1998 at 107-08 (Feb. 1987).

Airport proprietors around the nation will be watching the response of the federal government and the courts to the Denver noise rule in order to determine whether they have a green light to proceed with their own noise-based restrictions. Indeed, a comparable rule is already being finalized in Minneapolis and Seattle has formed a committee that is looking at the Denver rule as a possible model for new regulations at Sea-Tac International Airport.

Continental believes that the Denver rule and other noise-based restrictions on air carrier operations pose a serious threat to the attainment of basic Congressional policies in the air transportation field. Congress has chosen to deregulate the air transportation industry in order to permit competitive market forces to spur the development of an efficient and effective national air transportation system. In addition, Congress has directed the FAA to adopt standards for the control and abatement of aircraft noise that reflect a balance of noise mitigation, safety, and economic considerations. The FAA has responded to this directive with a comprehensive fleet compliance rule which has already dramatically changed the fleet composition of our nation's airlines. Local noise-based airport use restrictions are fundamentally at odds both with the reliance on competitive market forces that underlies deregulation and with the careful balance of noise reduction and economic considerations reflected in the FAA's fleet composition regulations.

Continental believes that aircraft noise issues must be addressed at the national rather than the local level. Local decision-making in this area is inherently skewed toward parochial responses to the impact of aircraft noise on citizens living in the vicinity of the airport. The relatively small number of persons adversely affected by aircraft noise are concentrated in the local communities near the airport and can readily generate political pressure for the adoption of restrictions on air carrier operations designed to reduce aircraft noise. The millions of passengers that use the airport and the numerous other communities that depend upon the airport for convenient low-cost air transportation are disenfranchised from the local decision-making process. Citizens who have contributed to the construction of our nation's airports through ticket purchases and tax dollars are powerless to turn back the trend toward piecemeal, ad hoc local reregulation that will undermine the ability of air carriers to provide convenient, high frequency, low-cost service.

I would like to focus my attention today on the threat that local noise rules pose to the effectuation of vital federal policies and the need for the federal government to assure that the impact of corrective measures on all Americans—those that depend on the air transportation system and those that bear the burden of airport noise—is carefully considered in determining the appropriate response to airport noise issues.

THE AIRLINE DEREGULATION ACT OF 1978

After years of careful study, Congress in 1978 concluded that the complex economic regulatory scheme that had governed the air transportation system since 1938 should be dismantled and replaced by a system relying on competitive market forces. Congress underscored the pivotal role of competition to the efficient and effective development of the nation's air transportation system in the policy section of the Airline Deregulation Act of 1978, 49 U.S.C. § 1302. In that provision, Congress declared that the public interest required:

"(4) The placement of maximum reliance on competitive market forces and on actual and potential competition (A) to provide the needed air transportation system, and (B) to encourage efficient and well-managed carriers to earn adequate profits and to attract capital, . . ."

* * * * * * *

"(9) The encouragement, development, and maintenance of an air transportation system relying on actual and potential competition to provide efficiency, innovation, and low prices, and to determine the variety, quality, and price of air transportation services."

As the Conference Report on the deregulation bill noted, "this new, comprehensive legislation . . . entirely overhauls the aviation regulatory system." H. Rep. No. 95-1779 at 55. The heart of the Act was the elimination of restrictions on the routes that could be served by air carriers and the fares that could be offered to the public. The ability of airlines to enter new routes and to rapidly initiate or expand activity at particular airports serves as the primary means of assuring reasonable fares and adequate levels of services under deregulation.

Deregulation has radically changed our nation's air transportation system. In order to enhance efficiency, carriers have established hub and spoke route systems that enabled them to reduce costs and to offer more frequent and less expensive service to passengers. Deregulation has produced enormous savings for the traveling public and has stimulated the growth of the air transportation system. The Brookings Institute estimates that consumers are saving $6 billion a year through lower fares and increased quality and frequency of service. In response to lower fares and more convenient service, passengers are booking flights at record levels. The number of revenue passengers enplaned has increased from 207 million in 1976 to 360 million in 1986.

The level of operations of individual air carriers at particular airports during deregulation has changed dramatically in many instances in response to competitive forces. At Newark, Eastern, United, and TWA were the top three carriers in 1979 with 60.5% of total enplanements but were the second, fourth, and tenth ranked carriers in 1984 with only 22.1% of total enplanements. Similarly, in Kansas City, TWA, United and Delta were the top three carriers in 1980 with 73.5% of total enplanements but ranked third, fifth, and seventh in 1986 with only 18% of total enplanements. Finally, in Phoenix, American, TWA, and Hughes Airwest were the top three carriers in 1979 with 64.2% of total enplanements but were the fourth, fifth and second (Republic) in 1984 with only 29.9% of total enplanements. In each of these cases, the leading carrier in the more recent of the two years listed had not even operated at the airport in 1980—People Express entered Newark in 1981, Eastern entered Kansas City in 1983, and America West entered Phoenix in 1983.

Noise budget regulations such as the recently enacted Denver rule will create barriers to entry and growth and will thus impede the ability of carriers to respond to perceived competitive opportunities. For example, under the Denver rule more than 80% of the total airport noise ceiling is allocated to two carriers—Continental and United. Similarly, under the proposed Minneapolis rule, one carrier (Northwest) would be granted 85% of the total noise ceiling—more than 18 times the second largest carrier's allocation and almost 6 times greater than the combined allocations of the second, third, fourth, fifth and sixth largest carriers. In both Denver and Minneapolis, incumbent carriers with a small number of flights and new entrants would be frozen at the equivalent of 3 (Minneapolis) or 4 (Denver) 727-200 flights per day unless they were able to purchase additional noise allotments from other carriers serving the airport.

The dangers of noise-based limitations on the ability of carriers to add service in response to competitive conditions are graphically illustrated by an examination of several of the recent airline mergers approved by the Department of Transportation. For example, in its Opinion and Order approving Northwest Airlines' acquisition of Republic Airlines, the Department of Transportation emphasized that "the central inquiry in this, and any, airline merger case is whether there are factors that might delay or prevent carriers from quickly entering the market—however defined—in response to an attempt to raise prices above competitive levels." NWA-Republic Acquisition Case, Docket 43754, Order 86-7-81 at 11 (July 31, 1986). The critical question examined by the Department in connection with the Northwest-Republic transaction was whether the merger of the two hub carriers at Minneapolis-St. Paul International Airport (MSP) would harm competition.

The Department of Transportation approved the Northwest-Republic merger over the objections of the Department of Justice because it concluded that other carriers could rapidly enter or expand service at MSP in response to post-merger efforts by Northwest to use its dominant position to raise fares above competitive levels.

"At MSP, the fact that the merged carriers would control 75 percent of the gates in MSP's main terminal is a matter for some concern, especially in light of the large number of MSP markets where direct competitive overlap will be lost. Nonetheless, a number of factors convince us that conditions at the airport are not likely to deter or delay entry. . . .

In addition, even if a carrier needed to develop a major hubbing operation to be successful at MSP, sufficient gates could probably be obtained within two years. . . . It appears that hubbing operations can be planned and put into operation relatively quickly." Order 86-7-81 at 14-15.

The entry conditions on which the Department of Transportation relied in the Northwest-Republic case would be dramatically altered by the adoption of the noise rule that has been preliminarily approved for MSP by the Metropolitan Airports Commission. That rule would allocate to Northwest approximately 85% of the total noise available to all air carriers at MSP. As a result, even if other carriers could obtain or construct sufficient gates to offer a competitive pattern of service at MSP, the noise rule would prevent meaningful entry or expansion by carriers seeking to compete with Northwest. I believe that it is clear that the Department of Transportation would have disapproved the Northwest-Republic merger as anticompetitive if the noise rule that is now proposed for MSP had been in place in the spring of 1986.

The Minneapolis-St. Paul situation is not an isolated example. Shortly after approving the Northwest-Republic merger, the Department of Transportation authorized the merger of the two hub carriers serving St. Louis—TWA and Ozark. *TWA—Ozark Acquisition Case*, Docket 43837, Order 86-9-29 (September 15, 1986). As in the Northwest-Republic case, the Department placed substantial reliance on the ease of entry and expansion of service at St. Louis in finding that the merger of the two hub carriers would not endanger competition.

"The lack of airport facilities available for new entrants can seriously undermine the effectiveness of actual and potential competitors in disciplining the behavior of incumbent carriers. Therefore, we have carefully examined access conditions at St. Louis' Lambert Field, the only airport significantly affected by the acquisition which presents access problems, according to DOJ. At St. Louis, the combined carriers would control 56 of the 74 gates, and all gates are currently leased. Nonetheless, we agree with the ALJ that adequate facilities are likely to be available for carriers desiring to expand or begin service at St. Louis." *Id.* at 9.

In addition, in reviewing Texas Air's acquisition of People Express (and the assets of its Frontier Airlines subsidiary), the Department of Transportation carefully examined entry conditions at Denver's Stapleton International Airport.

"Texas Air's proposed acquisition of the Frontier assets will not result in any elimination of actual competition, since Frontier has ceased operations and has filed for bankruptcy. Nonetheless, acquisition through the asset transfer of scarce resources could, in some circumstances, result in a lessening of competition. If a shortage of facilities created a situation in which potential entrants found it very difficult to enter, and if an acquisition of a large block of those facilities by a dominant competitor substantially increased potential entrants' difficulties in obtaining access to the necessary facilities, then the transaction could lessen competition by raising entry barriers." *Joint Applications of Texas Air Corporation and People Express, Inc.*, Docket 44365, Order 86-10-26 at 20 (October 14, 1986).

The Department found that the construction of a large number of new gates eliminated any competitive concern at Stapleton raised by Texas Air's acquisition of Frontier's assets. *Id.*, Order 86-10-53 at 18. The recently-enacted Denver noise rule, however, will prevent all new entrants and those incumbent carriers currently providing only limited service at Stapleton from substantially increasing the number of flights that they offer and therefore will limit the effectiveness of actual and potential competition in disciplining the behavior of the two incumbent hub carriers.

In addition to creating barriers to entry and expansion that will reduce the contestability of many city pair markets involving the restricted airport, local noise-based use restrictions will influence the decisions of air carriers concerning rates, routes, and services made available to the traveling public. Rather than responding to market conditions in formulating route, fare, and service strategies as Congress envisioned, see 49 U.S.C. § 1305(a)(1), carriers laboring under local noise restrictions will have to focus on maximizing the service that they can provide without exceeding their noise quotas. Noise considerations may deter carriers froim maintaining or expanding nighttime operations or service on routes that can only be operated economically with the noisier aircraft in the carrier's fleet. In addition, as each layer of noise regulation reduces the efficiency of the carrier's operations and thereby increases its costs, the carrier's ability to offer low fares will be eroded. The spread of local noise-based restrictions on air carrier operations thus will undermine the central tenets of deregulation and jeopardize the effectuation of the Congressional policies embodied in the Airline Deregulation Act of 1978.

THE FEDERAL FLEET COMPLIANCE PROGRAM

The federal government has long been active in the effort to limit aircraft noise by reducing noise at the source through regulation of the aircraft operated in interstate air commerce. Congress in 1968 granted the Federal Aviation Administration the authority to regulate aircraft for the purpose of noise abatement. In section 611 of the Federal Aviation Act, 49 U.S.C. § 1431, Congress required the FAA to balance a number of factors—safety, economic reasonableness, and technological practicability—in promulgating aircraft noise regulations. *See* 49 U.S.C. § 1431(d).

The FAA in November 1969 adopted regulations limiting noise emissions of certain new aircraft types. *See* Federal Aviation Regulations, Part 36, 14 C.F.R. § 36. The FAA pursued a phased approach that first extended the Part 36 requirements to all new aircraft. *See* 38 Fed. Reg. 29569 (Oct. 26, 1973). Subsequently, in 1976, the FAA promulgated regulations requiring all existing aircraft with maximum weights greater than 75,000 pounds to be retired or retrofitted to meet the requirements of Part 36 in accordance with a multi-step schedule ending on January 1, 1985. *See* 41 Fed. Reg. 56046 (Dec. 23, 1976). Following the issuance of the stage 1 phase out regulations, the FAA in 1977 adopted more stringent noise standards (stage 3 standards) for certification of new aircraft types. *See* 42 Fed. Reg. 12371 (March 3, 1977). The stage 3 regulations ensure that the new generation of aircraft employ the best noise technology currently available.

At the time that the federal fleet compliance program was adopted, approximately 75% of the U.S. fleet of large jet aircraft did not comply with Part 36 (stage 2) noise standards. *See* 41 Fed. Reg. 56046 (Dec. 23, 1976). The FAA estimated that without any federal regulation 50 percent of the nation's stage 1 aircraft would remain in service in 1990. *Id.* Consistent with the Congress' requirement that the FAA consider the economic reasonableness of any regulation of aircraft noise, the FAA permitted carriers to choose whether to retire stage 1 aircraft or to retrofit them to enable them to comply with stage 2 requirements. The FAA assumed, however, that most two-engine and three-engine aircraft (727s, 737s, and DC-9s) would "be modified rather than replaced" because "most of these airplanes have a long remaining useful life." Aviation Noise Abatement Policy, *supra*, at 37. The FAA expressly found that "[m]easures imposed by other jurisdictions that would require more accelerated compliance with Part 36 requirements would conflict with the purpose of this federal regulation." *Id.* at 41.

The comprehensive federal efforts to control aircraft noise at the source has significantly reduced the number of persons adversely affected by aircraft noise.

"In 1974, 6 million people lived within areas exposed to an average day-night sound level of 65 decibels (Ldn 65) or greater. In 1985, that number had been reduced by 16% to approximately 5 million. Over the next two decades, by the year 2005, we project that the land areas encompassed within Ldn 65 will shrink by nearly one-half, even if no initiatives are pursued to accelerate acquisition of new technology (Stage 3) aircraft, assuming no significant numbers of Stage 2 aircraft remain in service." Statement of Donald D. Engen, Federal Aviation Administration, Hearings Before the House Aviation Subcommittee ("*Aircraft Noise Hearings*") at 34 (July 16, 1986).

The Air Transport Association has estimated that by the end of 1985 its member airlines had spent over $750 million to retrofit and re-engine stage 1 aircraft in order to comply with the federal fleet regulations and more than $20 billion on the acquisition of modern stage 2 and stage 3 aircraft. Statement of Gabriel Phillips, Executive Vice President, Air Transport Association, *Aircraft Noise Hearings* at 552 (July 17, 1986). In addition, airlines belonging to ATA have accepted special noise abatement flight procedures that have increased their operating costs by approximately $165 million per year. *Id.*

In response to a request from Congress, the FAA recently conducted a detailed study of additional steps that could be taken to encourage airlines to accelerate the replacement of stage 2 aircraft with quieter stage 3 aircraft. The FAA estimated the rate at which stage 2 aircraft would be phased out by air carriers without new regulations or economic incentives and concluded that a mandatory phase out would impose enormous costs on air carriers—$9 billion for a 1995 stage 2 phase out, $3.8 billion for compliance by 2000, and $1.2 billion for compliance by 2005. Department of Transportation, *Report to Congress: Alternatives Available to Accelerate Commercial Aircraft Fleet Modernization* at 9 (April 11, 1986). The FAA cautioned that additional fleet compliance requirements should only be considered as part of "a comprehensive national strategy" that focused on operational procedures, land use controls, soundproofing, and other non-aircraft noise mitigation measures as well as on aircraft noise emission standards. *Id.* at 2. The FAA recommended that a detailed cost/benefit study be completed before taking any action on proposals to mandate more stringent fleet noise standards.

Local noise-based airport use restrictions undermine the balanced approach to aircraft noise regulation reflected in the federal fleet compliance program and recommended in the recent FAA study. Although the existing and proposed local noise rules differ in their specific formulations, they all directly or indirectly require air carriers to increase the proportion of stage 3 aircraft employed in order to maintain or increase current service levels at the restricted airport. Carriers that have spent huge sums to comply fully with the federal fleet regulations are increasingly confronted with local rules that penalize their use of complaint stage 2 aircraft either by preventing or limiting their use or by imposing noise quotas that are heavily weighted against the operation of stage 2 aircraft.

Locally-enacted noise restrictions are supplanting the uniform federal fleet rules with ad hoc requirements for quieter fleets at specific locations. Over time, local noise restrictions are likely to force carriers to accelerate their acquisition of stage 3 aircraft or to curtail service. Each airport that implements a noise rule increases the pressure for the adoption of similar rules at other airports. This is because local restrictions export noise to other communities by diverting quieter stage 3 aircraft to the restricted airport and shunting noisier stage 2 aircraft to other communities. Islip's noise ceiling at Long Island MacArthur Airport exports its unwanted aircraft noise to other communities in much the same fashion as Islip has attempted to ship its unwanted garbage to other communities. Communities without airport noise restrictions are likely to realize that unless they also adopt regulations they will be forced to accept noisier aircraft that cannot be used elsewhere.

Air carriers confronted with the likely proliferation of local use restrictions face difficult choices in fleet planning. Rather than basing aircraft acquisition decisions on efficiency considerations, carriers now must take the existing and potential local noise restrictions into account in their fleet planning process. As a result, Congress' directive that the economic reasonableness of fleet composition rules be carefully examined and weighed against noise mitigation benefits is being overridden by local airport authorities.

THE DENVER NOISE RULE

An examination of Denver's Aircraft Noise Limitation Program ("the Rule") illustrates the problems raised by local noise regulations and highlights the need for federal action to ensure that national air transportation needs are considered along with legitimate local concerns in formulating a balanced response to the problem of aircraft noise.

A SUMMARY OF THE DENVER RULE

The stated purpose of the Denver Rule is "to limit the airport noise exposure level at Stapleton International Airport to the average airport noise during the base period [and] to make possible future reductions of the airport noise exposure level." *See* § 160.01. However, the Rule does not even purport to regulate the overall level of airport noise, because it expressly exempts all aircraft operations *except* those of scheduled air carriers generating an average daily noise exposure level of 56.88 db. §§ 160.03–7, 160.04–2. The broad exemption provision (§ 160.03–7) excludes from regulation all-cargo air service operations, government-owned aircraft operations, international service operations, general aviation operations, charter operations, and operations by air carriers which produce a carrier noise exposure level (CNEL) below the specified threshold noise exposure level (TNEL) of 56.88 db.

The key features of the Rule (Appendix A) are:

1. The Rule establishes a base period airport noise exposure level (ANEL) of 75.41 db. The base period ANEL was set by averaging the overall air carrier noise level at the airport during September 1985 and June 1986. (§§ 160.03–2, 160.03–3, & 160.04–1). The decibel level for the ANEL was computed using an ad hoc 3-point noise metric methodology devised by the city's consultant.

2. Individual carrier noise levels (CNELs) are fixed for the six carriers (American, Continental, Delta, Eastern, TWA, and United) that produce a noise level in excess of the threshold noise exposure level (TNEL) of 56.88 db. The CNELs were allocated in direct proportion to the amount of noise made by each of these six air carriers during July 1986. (§ 160.04–2). As a result, those carriers operating a relatively greater percentage of noisier aircraft and conducting a relatively greater percentage of night operations received disproportionately large noise allocations.

3. The CNELs set forth in the Rule are frozen for the indefinite future. Carriers are permitted to lease, sell, or assign noise units to other carriers, but such transfers are subject to a 2% reduction which is permanently extinguished. By eliminating 2% of the noise transferred among carriers, the Rule will reduce the total noise available in the future for operations by non-exempt carriers. (§ 160.05–2).

4. Exempt carriers providing scheduled service are free to increase operations until they reach a level of 56.88 db—the equivalent of 4 727–200 daytime flights each day. (§§ 160.03–7(2), 160.04–3).

5. The base period ANEL of 75.41 db is subject to an intended reduction of 3% if a new airport is not ready for occupancy by December 31, 1994 and a further intended reduction of 2% if a new airport is not ready by December 31, 1999. (§ 160.06). The Rule does not specify how such a reduction in the ANEL would be computed or how it would affect the CNELs allocated to the non-exempt carriers or the TNEL.

6. Violations of a carrier's noise exposure limit will result in fines (supplemental landing fees) of $2,000 per day for each equivalent aircraft flight (using 727–200/9 as the base aircraft) in excess of the carrier's noise limit and in a reduction in the carrier's noise allocation. (§ 160.08).

ADVERSE IMPACT ON THE NATIONAL AIR TRANSPORTATION SYSTEM

1. *Immediate Impact of the Rule.*—The impact of the Rule on the effective date (June 5, 1987) will vary from carrier to carrier. Based on March 1987 schedules, 5 of the 6 non-exempt carriers would have to modify their operations in order to comply with the Rule. The Rule would have an immediate adverse impact on these non-exempt carriers. For example, Eastern would have to switch at least 2 of the 3 night flights in its March schedule to 185-seat 757 aircraft instead of the 149-seat 727–200 aircraft now being operated at Stapleton. The Rule thus would force Eastern to use aircraft that are larger than necessary for its Denver routes. Continental would be forced to drop the equivalent of more than 19 727–200/9 day flights from its March 1987 schedule. The least burdensome alternative available to Continental in order to meet its CNEL of 71.11 db would require moving nighttime departures from the post-2200 period to pre-2200. Such a scheduling adjustment would reduce Continental's scheduling flexibility but would provide no meaningful noise benefit to the community since the aircraft would be scheduled to push back from the gate prior to 2200 but the actual noise-creating event—the takeoff of the aircraft—would occur after 2200 in either case.

2. *De Facto Nighttime Curfew.*—A second impact of the Rule stems from the 10 db penalty assigned to nighttime (2200–0659) operations under the Ldn methodology. Since all the non-exempt carriers are either over or just under their allotments, they generally would be unable to add night operations even with relatively quiet aircraft unless they sacrificed existing day operations. This is particularly true of nighttime operations using noisier stage 2 aircraft. The Rule would serve as a de facto stage 2 nighttime curfew for exempt carriers and new entrants operating below the 56.88 db threshold noise exposure level. A single 727–200 night departure, for example, would exceed the threshold limit applicable to all exempt carriers and new entrants.

Carriers such as Continental that expect to increase their total number of operations at Denver will find night flights extremely costly in terms of the lost opportunity to add daytime operations. The incentives built into the Rule will push carriers to move as many night operations to daytime as possible in order to generate the flexibility to expand daytime service. In essence, the Rule will change the economics of nighttime operations at Denver. Such flights, which provide a valuable service to a segment of the traveling public, now can be supported at low load factors because of the "subsidy" from additional utilization of a capital asset. The Rule, however, adds a major cost to night flights—the lost opportunity to fly 10 equivalent day flights. This additional cost will result in a virtual de facto curfew on additional night operations at Stapleton.

The burden on the traveling public and the air transportation system resulting from such a de facto curfew is not justified by a corresponding noise mitigation benefit. Continental representatives have been informed by the Denver Director of Aviation that the lower nighttime traffic volumes have enabled the airport to employ a head-to-tail landing and takeoff runway pattern that results in little if any nighttime noise impact on residential areas.

3. *Service To Smaller Communities.*—The Rule is likely to have an adverse impact on service to smaller communities for two reasons. First, such communities cannot be served economically by 130-150 seat aircraft. Efficient service requires use of smaller aircraft such as DC9-10s, DC9-30s, 727-100s and 737-200s. These aircraft, however, are all relatively noisy stage 2 equipment. The existing stage 3 narrowbody aircraft in Continental's fleet—737-300s and MD-80s—are not well suited to less heavily traveled routes. Use of smaller stage 3 aircraft such as the BAe-146 and the F-100 would render service to many smaller communities uneconomical for Continental because of the high ownership and operating costs of these aircraft. In allocating a limited noise allotment among possible alternatives, carriers may well be required by noise budget considerations to forego the relatively high-cost choice (in noise terms) of service to smaller communities.

Second, the economic viability of relatively frequent jet service to smaller communities depends on the size and efficiency of hub operations at Denver. To the extent that the noise rule restricts the hub carriers' ability to increase the size of their connecting banks, frequent service to some smaller communities will be rendered uneconomical. The growth issue is discussed below.

4. *Restrictions Of Growth At Denver.*—The FAA projects continued rapid growth at Denver through 2000. Enplanements at Stapleton are forecast to grow from 14.4 million in 1985 to 21.3 million in 1990 to 34.3 million in 2000. *See* FAA Terminal Area Forecasts FY 1986-2000, cited in FAA Aviation Forecasts at 107. Denver's projected 6% annual growth rate is larger than that of any of the top 10 largest airports and more than double the projected rate for such major airports as Atlanta, Los Angeles International, San Francisco, JFK, and LaGuardia. *Id.*

One of the most serious potential adverse effects of the Rule on the national air transportation system is the danger that it will stifle the growth of one or both hub carriers at Stapleton and thereby undermine the growth of the most important airport in the Western part of the nation.

At present, Continental and United use Stapleton as a hub. In March 1987, Continental operated 251 daily departures and United operated 223 daily departures. Continental expects to undertake significant growth at Denver over the next few years. To support its growth plans, Continental has contracted for additional gate space at Stapleton.

The Denver noise rule, however, freezes Continental's noise allocation at a level more than 15% below that required for its 251-departure March 1987 schedule and creates a significant obstacle to achieving its growth expectations. The requirement that Continental either reduce its expected growth at Stapleton or grow primarily with stage 3 aircraft would have a significant adverse effect. A reduction in Continental's growth at Stapleton would impair the ability of its hub to generate feed traffic to support relatively frequent jet service to smaller communities, reduce load factors, and increase relative costs. These consequences would adversely affect travelers by reducing service levels and increasing average fares. Alternatively, the requirement of predominately stage 3 growth at Denver could well increase Continental's capital expenditure requirements for aircraft, particularly if other airports respond to the precedent set in Denver by enacting their own rules. Increased ownership costs would be reflected in increases in fare levels and lower growth rate. Finally, by requiring that Continental devote an increasing percentage of stage 3 aircraft to Stapleton, the Rule will export noise to other communities where the airport operator has refrained from adopting noise-based restrictions.

On the other hand, United has announced a reduction in its level of operations in Denver to 202 daily departures in June 1987, and its elimination of many night operations. The result is that United will use only 70.34 db of its 71.77 db allocation. Thus 1.43 db, the equivalent of 35 daytime 727-200/9 flights will be retired unless United chooses to sell its excess allocation. This illustrates the effect of arbitrarily allocating a fixed amount of noise to incumbent carriers. Either the capacity of Stapleton will be significantly reduced, or the rule will produce a windfall for United which will also have the effect of raising the costs of one or more of United's rivals.

5. *Increased Risk Of Airport Delays.*—The Rule will encourage carriers to schedule flights at the beginning and the end of the daytime period—0700-0715 and 2145-2159—since flights at these times are not assessed a 10 db penalty. By scheduling flights at these times, carriers can both maximize aircraft utilization and the utilization of their noise allocation. Over time, as current flights are moved from nighttime into these adjacent time periods and new flights are added with the contemplated growth of operations at Stapleton, it is likely that delays will develop. As DOT has recently observed, such delays impose significant costs on air carriers and the traveling public. *See* DOT Order 87-1-54 (January 28, 1987); DOT Order 87-3-39 (March 11, 1987).

THE DENVER RULE IS ARBITRARY, DISCRIMINATORY, AND UNREASONABLE

In addition to its other failings, the Denver noise rule is arbitrary, discriminatory, and unreasonable. First, the Rule only purports to cap noise by "scheduled aircraft excepting air-cargo service" (§ 160.03-2). International operations, military aircraft operations, charter flights, air-cargo flights, general aviation flights (including corporate jets) as well as air carrier operations below the threshold level are unregulated. For example, business jet operations equaled 6% of the total air carrier jet operations at Stapleton in 1984. In addition, Continental's informal survey of cargo carriers now operating at Stapleton indicates that as a group they produce total noise of approximately 63 db which exceed the noise cap of 62.57 db allocated to the third largest air carrier at Stapleton. As a result of the broad exemptions in the Rule, the ANEL is a rather meaningless construct. From a noise standpoint, the class of aircraft or its particular mission is irrelevant. By exempting the bulk of users of the airport from the Rule's noise cap, the City has failed even to guarantee that airport noise will remain within its arbitrarily selected ceiling of 75.41 db.

Second, the method employed to allocate noise among the 6 non-exempt air carriers is irrational and counterproductive. The City's Noise Rule Group in August 1986 set as one of its objectives that the "Rule should recognize past progress toward meeting noise objectives." In promulgating the Rule in March 1987, however, that objective was ignored and the non-exempt carriers were assigned noise allotments based on the proportion of the total air carrier noise that they created in July 1986. As a result, the carriers with the lowest relative utilization of stage 3 aircraft and the highest relative proportion of night operations received the largest relative noise allocations. These carriers, who have the greatest potential to reduce noise in the future, are provided with little incentive to do so because they receive a disproportionately large amount of noise for the percentage of operations they conduct at Stapleton.

It is also clear that the Rule discriminates among classes of users of the airport by placing the entire burden on scheduled air carriers. In addition, the Rule discriminates among scheduled air carriers by providing United with an allocation that is 116% of Continental's allotment despite the fact that Continental operated far more flights and seats at Stapleton than United. The discrimination against Continental is illustrated by the following table:

	Continental (including FL & PE)		United	
		Percent		Percent
Actual Allocation:				
In db	71.11		71.77	
In 727-200/9 (day flights)	106.17		123.59	
Percent of ANEL	37.15		43.25	
Current Month (March 1987):				
Departures (daily)	251	47.18	223	41.92
Seats (daily)	33,966	45.72	32,221	43.37
Stage 3 percentage	33.5		25.1	
Night operation percentage	2.79		7.86	
Period used to allocate noise under the rule (July 1986):				
Departures (daily)	303	51.85	217.5	37.72
Seats (daily)	40,557	50.3	31,241	38.74
Stage 3 percentage	36.3		21.9	
Night operation percentage	5.36		10.76	

Finally, the Rule is also unreasonable. The City has received hundreds of millions of dollars in federal funds to construct, maintain, and expand Stapleton for the benefit of local residents and the millions of passengers traveling to, from, or through Denver each year. In addition, air carriers such as Continental have expended tens of millions of dollars on facilities at the Airport to make Denver one of the nation's largest airports and the principal hub airport in the Western United States. The City has recently taken steps to expand the ability of the airport to meet anticipated growth by adding new concourses that will increase gate capacity this year by almost 30%. In addition, the airport has recently opened a short additional north-south runway that should reduce delays at the airport.

The freezing of air carrier noise at historical 1985–86 levels is inconsistent with the other steps taken by the City to facilitate growth at the Airport. The Rule introduces a constraint that will inhibit growth by carriers seeking to enter or expand operations at Denver. Given the modest noise problem at Denver (particularly in comparison with other major airports) and the likelihood that any problem will be ameliorated in the future by anticipated fleet mix changes and the construction of a new east-west runway, it is unreasonable for the City to freeze the relative positions of air carriers at the airport through the imposition of a system of carrier-specific noise caps.

ABSENCE OF COMMUNITY NOISE BENEFIT

The City of Denver has failed to demonstrate that there is a serious noise problem at Stapleton, that other less burdensome alternatives have been implemented or would be ineffective in mitigating the problem, and that the noise rule will produce meaningful benefits for a significant percentage of the Denver residents adversely affected by airport noise.

1. *Failure to Develop Essential Data.*—A year prior to the issuance of the Rule, the City of Denver applied to the FAA for a grant to fund a Part 150 noise mitigation study for Stapleton. Among the tasks to be undertaken during the Part 150 study was the development of "[n]oise exposure contours and associated demographics and land use information for 1985 and for two future years." Continental is not aware of any effort by the City or its expert consultants to develop a noise exposure map utilizing the Part 150 methodology prior to adopting the Rule.

Rather than measuring the area, the number of residents, and the types of land uses adversely affected by airport noise through the development of accurate noise contours, the City has chosen to regulate total noise energy regardless of the extent of its impact on the community. The methodology underlying the Rule ignores such basic information as flight tracks and runway usage. It simply computes noise energy values for individual aircraft, air carriers, and the airport by using the logarithmic sum of A-weighted SELs at 3 points (20,000 ft. from landing and 30,000 and 60,000 ft. from the start of take-off roll) along a straight in-and-out flight track.

The City's focus on overall noise energy levels rather than the actual impact of airport noise on the community alone provides a sufficient basis for condemning the Rule as an unreasonable regulation. As the FAA noted in its statement of basis and purpose accompanying its Part 150 noise impact study regulations:

"[T]he FAA believes that the provisions of Part 150, like those in the ASNA Act, are *essential* to the attainment of an adequate weighting and balancing of air transportation and air commerce objectives against the myriad of social, community, and other real interests that may be affected by airport noise. In addition, it is clear from the legislative history of the Act that the Congress intended to establish a standardized framework for ensuring that localized airport noise restrictions are based on a broad base of information and are thus reasonable, fair, and responsive to the needs of both air commerce and the community.

"The FAA, therefore, views Part 150, or a process similar to it [whether or not the process is approved by the FAA], as setting forth the kind of rational decision-making procedure that is appropriate to meet the test of reasonableness set forth by the United States Court of Appeals for the Second Circuit in *British Airways Board, et al.* v. *Port Authority of New York and New Jersey*, 558 F.2d [1]075 (1977)." 49 Fed. Reg. 49260, 49263 (Dec. 18, 1984) (emphasis added).

The failure to focus on community impact rather than total noise energy is of particular importance in Denver because of the existence of a large buffer area to the north of the airport provided by the Rocky Mountain Arsenal. Higher absolute noise levels cannot be translated automatically into a more significant community impact because an enlargement of the 65 db Ldn contour over the arsenal or over agricultural or industrial use areas near the airport does not result in any additional adverse noise impact on the community.

2. *Failure to Employ More Effective Alternatives.*—In its rush to enact the Rule, the City ignored more effective means of reducing the impact of airport noise on the community. As of July 1986, the City had yet to complete many of the 13 noise mitigation measures recommended by its own consultant in March 1984 and had not even started to implement a number of the recommendations. For example, the City had yet to begin implementing three major land use recommendations (compatible use zoning, sound insulation of existing buildings, and acquisition of property or noise easements) or the two airport plan recommendations (erection of noise barriers along the south boundary of the airport and the construction of an aircraft runup area with a noise barrier).

The City's failure to move expeditiously to build the new east-west runway recommended in a 1986 federal environmental impact study is also troubling. The data available to Continental indicates that the most important aspect of noise mitigation at Denver is to direct airport noise away from residential areas. The proposed east-west runway would alter the shape of the noise contour, reducing significantly the number of homes within the 65 Ldn contour. Rather than pursuing this promising noise mitigation option, Denver entered into an agreement with neighboring Adams County that prohibited commencement of construction of the east-west runway before January 1, 1988 and that imposed numerous additional conditions and restrictions on the Airport's right to construct and operate the runway. According to the 1986 federal environmental study, even if the east-west runway is built, the operational restrictions contained in the intergovernmental agreement would *increase* the number of residents within the 65 Ldn contour in 1990 by 13% (from 10,177 to 11,505).

3. *Lack of Local Benefit.*—Available data reveal that the number of persons adversely affected by aircraft noise in Denver is quite small. A 1984 report issued by the City's noise consultant, Harris Miller Miller & Hansen Inc., estimated that in 1982 there were 33,400 people living within the 65 Ldn contour in Denver. The report recommended the adoption of a revised preferential runway system and revised departure routings and estimated that these changes would reduce population within the 65 Ldn contour by 25% (from 33,400 to 24,900) based on 1982 operations. By contrast, a number of other major airports have a far larger population living within the 65 Ldn contour—Atlanta (81,000), Boston (40,000), Chicago-O'Hare (400,000), Los Angeles International (92,000), New York-LaGuardia (617,000), and Seattle (78,000).

A final environmental impact statement (FEIS) prepared in 1986 to assess expansion alternatives designed to reduce growing delay problems at Stapleton contains more recent noise contours. The FEIS found that, without making any changes in the runway configuration at Stapleton, the 65 Ldn contour in 1990 would be "approximately 10% smaller" than the 1984 contour. Significantly, the FEIS predicted a 21% reduction by 1990 in the *residential* land area within the 65 Ldn contour. The noise impact portion of the FEIS, which was also prepared by the City's present noise consultant, estimated that the "base case" population within the 65 Ldn contour in 1990 would be 13,193 and that the affected population could be reduced by 30% to 10,177 by the construction of a new east-west runway. The two prior studies of noise impact at Denver thus conclude that without the Rule the population within the 65 Ldn contour would decline by more than 63% between 1982 and 1990 without the construction of the new east-west runway and by more than 70% if the new runway were built.

Continental is not aware of any projections that suggest that the Rule will provide any meaningful noise relief benefits to the community. Indeed, it is unlikely that the Rule will produce any significant benefits because the cap on the total noise produced by six non-exempt carriers cannot be translated into a reduction in the number of persons affected by aircraft noise. This point is illustrated by the City's own analysis of noise complaints. As the City's 1985 year-end summary states (Fourth Quarter 1985 Report at 3):

"Figure 5 graphically depicts the percentage of noise complaints coming from the four quadrants around the Airport since 1980. It shows that an increase in the number of noise complaints hardly ever correlates to an increase or decrease in the overall noise exposure from the Airport. This conclusion can easily be drawn by noting that although the areas west and south of the Airport receive the smallest number of overflights, these areas consistently generate the highest percentage of complaints." (emphasis added).

Even assuming that there is some rough correlation between the total energy level produced by the six non-exempt carriers and the exposure of residential areas to aircraft noise, there is no basis for concluding that the Rule would produce any noticeable benefits. As the City's own expert has acknowledged, a "reduction in overall exposure of less than one decibel . . . would not be noticeable."

A PROPOSED SOLUTION

As I have outlined above, local decision-making on airport noise issues is inherently biased toward the adoption of restrictions to reduce the impact of noise on the residents living near the airport. Despite years of repeated requests from Congress and the FAA, local communities have often failed to pursue land use measures and other approaches to reducing the impact of aircraft noise that do not limit air carrier operations. FAA Administrator Engen testified in 1986 that "[t]oo many communities have done too little to assure compatible land uses around their airports, and this has led to considerable pressures on local elected officials and airport authorities to artificially restrain the number of airport operations at various airports throughout the country." Aircraft Noise Hearings at 35.

The overriding national interest in ensuring the effective and efficient functioning of the air transportation system requires that the ad hoc process of local reregulation through the adoption of noise-based use restrictions be subjected to oversight at a national level. Congress should insist that local airport authorities develop adequate data regarding the nature and extent of the local noise problem and the range of measures that could be employed to mitigate the effect of aircraft noise before noise-based restrictions on air carrier operations can be imposed. The best way to ensure adequate study is to require that airport proprietors complete the Part 150 process prior to enacting noise-based use restrictions.

In addition, it is essential that an agency with expertise in the operation of the national air transportation system evaluate the impact of noise-based restrictions proposed by local airport authorities. Continental believes that a uniform, four-part standard should be employed in reviewing local airport use restriction designed to control aircraft noise. The standard would require (1) that any proposed restrictions produce significant noise mitigation benefits, (2) that other reasonable alternatives have been implemented and/or shown to be inadequate, (3) that the restriction is nondiscriminatory, and (4) that the noise mitigation benefits outweigh any adverse impact on the national air transportation system. Such a standard would not prevent the adoption and implementation of restrictions that are truly needed to respond to a serious noise problem and that are tailored to avoid undue burden on the air transportation system. It would, however, protect against measures where the local problem is not significant when compared with the situation in other communities and when the community has failed to pursue land use and other less restrictive alternatives for mitigating the impact of aircraft noise.

Finally, Continental believes that Congress or the FAA should prohibit local authorities from excluding aircraft that comply with federal fleet standards. Air carriers should be subject to clear, uniform rules regarding the types of aircraft that can be included in their fleet and that can be operated throughout the national air transportation system. Noise budget regulations that permit the use at any aircraft that complies with federal standards but require carriers to choose between more flights with quieter aircraft and fewer flights with noisier aircraft are sufficient to protect local interests and are more in keeping with the principles of deregulation than outright bans of specific types of aircraft.

Senator **Ford**. Thank you very much.
Mr. Cutler.

STATEMENT OF ELIOT R. CUTLER, COUNSEL, ADAMS COUNTY AIRPORT COORDINATING COMMITTEE

Mr. **Cutler**. Thank you. Mr. Chairman, Senator Wirth:

The law firm of Webster & Sheffield has represented Adams County and the seven cities to which Commissioner Cramer earlier referred for nearly six years with respect to the development of a new Denver airport and the improvement of conditions at Stapleton.

Stapleton Airport abuts Adams County to the north, south, east and west. Thousands of Adams County residents live within the serious noise contours of Stapleton operations, many literally within a few hundred yards of the airport runways. As Stapleton has experienced explosive growth, its neighbors in Adams County have been battered by more and more noise.

I won't take the time this morning to review with you the extraordinary progress that has been made in the development of plans for a new airport. Rather, I'd like to focus on the airport noise limitation program, the rule to be imposed in Denver on the 5th of June.

This rule will serve three critical purposes.

First, it will keep current conditions from worsening and bring some relief to those most severely impacted by noise.

Second, it and other actions which Denver has taken or will take provide the basis for Adams County's acceptance of new runways and other interim improvements at Stapleton.

And, finally, all of these actions will demonstrate in a meaningful and convincing way that those responsible for governing the operation of both Stapleton and the new airport—that is, Denver and the FAA—can and will carry out their responsibilities in an environmentally acceptable manner.

Mr. Chairman, at this point in the record, and with the indulgence of Senator Wirth, I would like to enter into the record copies of correspondence which the two Senators from Colorado and the six members of the House of Representatives from Colorado have sent to the Administrator of the FAA emphasizing to him the importance of this rule not only to the improvement of current conditions here at Stapleton, but also to the development of a new airport.

Senator FORD. They will be included in the record.

Mr. CUTLER. In complaining about local noise restrictions such as the Stapleton program, the air carriers and their industry associations have asserted that the law governing airport proprietors' restrictions is vague and contradictory. They have argued that "a patchwork of contradictory and/or exceedingly complex court decisions" offer "no uniform standards" applicable to those restrictions.

These rather self-serving comments bear little relationship to the facts and come from airlines intoxicated with the notion that deregulation somehow conferred upon them an absolute right to fly what they please, when they please, and how they please, with no interference from the communities which they serve and whose facilities they use.

The airlines' assertions to the contrary notwithstanding, the Congress and the courts have formulated a well-crafted body of law concerning the rights of airport proprietors to control and regulate the use of their facilities.

The law provides that the federal government has preempted certain areas of regulation concerning airports and aircraft, such as the authority to regulate the use of the navigable airspace.

The law also clearly spells out the airport proprietors' obligations and authorities. Airport proprietors are responsible for ensuring that airport noise impacts do not unduly impinge upon the airport's neighbors, and they are empowered for that reason to establish requirements as to the permissible level of noise at their airports.

These federal guidelines have been set by the Congress—with the leadership, I might add, of this Committee, applied by the courts and affirmed by the agencies.

The Congress helped to establish the framework of federal and proprietors' responsibilities in 1968 and repeatedly and correctly has refused to alter it.

Earlier court cases had helped to provide a basis for the careful delineation of federal and local responsibilities adopted by the Congress, and many disputes concerning airport noise restrictions have been heard and decided in the lower federal courts since 1968 and since the Supreme Court decision in *City of Burbank* in 1973.

This body of case law is uniform and consistent in two important respects. First, in no published case, not one, has an airport proprietor's noise restriction been struck down on the grounds of preemption under Sections 307, 611, or 105(a) of the Federal Aviation Act.

And, second, the lower courts properly have limited proprietors' power in this area. Noise regulations established by an airport proprietor may not be arbitrary or excessively discriminatory among airport users. They must not unduly burden interstate commerce. And these tests have been applied by the courts with uniform results. Where a restriction has been found to be reasonable, non-arbitrary and nondiscriminatory, and not to constitute an undue burden on commerce, it has been upheld.

As far as the agencies are concerned, prior to the regime of the current FAA Administrator and his General Counsel, neither the Department of Transportation nor the FAA found the law regarding proprietors' rights uncertain or its consequences unsettling.

In sum, the Congress, the courts and the agencies repeatedly, consciously and deliberately have affirmed a regulatory framework whereby airport proprietors have the power to regulate airport access and use within reasonable limits in order to limit aircraft noise.

This clear and concise public policy demonstrably has provided a successful basis for balancing local concerns over aircraft noise, on the one hand, with the national interest in promoting interstate commerce.

Now, as we have heard from Mr. Hirst this morning, and as we have heard over and over again from the industry, the air carriers and the FAA have become frustrated with what they view as an alarming proliferation of local airport noise restrictions. They believe that such rules as Stapleton's have no place in a deregulated industry environment, unnecessarily complicate the carriers' scheduling and fleet assignment tasks, and threaten to wreak havoc upon the national air transportation system.

Presumably, they hope that the Congress will rescue them from the burdens of these restrictions by changing the law to limit proprietors' rights in the manner that Mr. Hirst has suggested.

The Congress need not and should not change the law. There may be a lot of things wrong with our air transportation system today, a lot of things which need to be fixed; proprietors' rights is not one of them.

There are several important reasons why the Congress should refuse to change the law. First, there has been no abuse of proprietors' rights. Airport noise restrictions, certainly those which possibly could be viewed as onerous, are relatively rare. Few airports have imposed them, and only Denver and Minneapolis among the principal hub airports have adopted or are close to adopting significant restrictions.

Moreover, these rules are not the random acts of willful proprietors. Those proprietors which have imposed noise restrictions have done so for the very good reason that the environmental capacity of the facilities which they own and manage has been or is about to be exceeded. Typically, these airports, as Stapleton is, are situated too close to where people live to tolerate greater frequencies of noisy operations.

Although deregulation may have conferred on the carriers a basic right to leave and enter markets at will, it did not confer, and I'm sure that this Committee and the Congress did not intend for it to confer, a concomitant right to increase operations to or beyond the capacity of any airport where a carrier decides it would be convenient to locate or expand a hub.

Carriers must begin to focus on the public sector costs of providing certain services in particular places, and reasonable noise restrictions are a proper way for proprietors to impose those costs.

Second, there is no evidence that the national air transportation system has been or will be disrupted by the rules which have been imposed.

Cries of alarm from the carriers do not constitute evidence of disruption, and moderately increased difficulty in scheduling aircraft does not rise to the level of an unreasonable burden on interstate commerce.

No such evidence has been adduced in Denver, for example, and it is difficult to imagine how the requirements actually to be imposed upon the carriers in Denver could be held to constitute an unreasonable burden on interstate commerce. In any event, the courts have demonstrated no reluctance or inability to strike down those rules which have been shown to impose unreasonable burdens or to unreasonably discriminate.

Third, increased Federal preemption or intervention will constitute an expensive assumption by the federal government of the liability for damages from excessive noise.

And finally, local proprietors are in the best position to determine what the acceptable noise levels should be in a given community.

It is fair to observe that if the Congress does not change the law, the solutions to local airport noise problems will continue to be somewhat ad hoc; but this is because the problems themselves are ad hoc. The fact is that different airports do have different capacity, access and noise problems which require different solutions. This may mean that the rules will not be uniform, but uniformity for its own sake has very little merit.

The dividing line that we've discussed this morning between federal and proprietor regulation has been quite carefully developed over nearly 20 years of legislation by the Congress and decisions by the courts. It represents a healthy balance. It doesn't appear to threaten the national air transportation system. And it is a balance which has been reached in an area of enormous potential conflict.

I urge you, Mr. Chairman, and I urge this Committee and the Congress not to tamper lightly with that balance.

Thank you.

[The statement and letters referred to follow:]

STATEMENT OF ELIOT R. CUTLER, ATTORNEY FOR ADAMS COUNTY, COLORADO AND THE CITIES OF AURORA, BRIGHTON, COMMERCE CITY, FEDERAL HEIGHTS, NORTHGLENN, THORNTON AND WESTMINSTER, CO

Mr. Chairman and Members of the Subcommittee on Aviation: I am pleased to appear before you today on behalf of Adams County, Colorado and the Adams County cities of Aurora, Brighton, Commerce City, Federal Heights, Northglenn, Thornton and Westminster. Webster & Sheffield has represented Adams County and its cities for nearly six years with respect to the development of a new airport in Adams County to replace Denver's Stapleton International Airport and the improvement of conditions at Stapleton pending completion of the new airport.

I. NOISE RESTRICTIONS ARE CRITICALLY IMPORTANT TO ADAMS COUNTY

Stapleton Airport abuts Adams County to the north, south, east and west. Thousands of Adams County residents live within the 65 and 70 ldn contours of Stapleton operations, many literally within a few hundred yards of the airport runways. As Stapleton has experienced explosive growth in air carrier operations, particularly since deregulation, its neighbors have been battered by more and more noise.

As neighboring jurisdictions, Adams County and its cities obviously have a valid interest and direct stake in Denver's ability as the airport proprietor to control airport noise at Stapleton. And as the host jurisdiction for the new airport, those concerns obviously apply there as well.

Although a great deal of work remains to be done, for the first time in decades a completely new airport at a new location is a realistic prospect for a major American city. This prospect exists today because *both* Denver *and* Adams County now are committed to reducing and mitigating noise impacts at the current airport over the course of its remaining life and to preventing similar problems from occurring at the new airport.

One local editorialist has noted that the extraordinary progress which has been made on airport issues in Denver "nearly defies political gravity." But the ultimate significance of all of what has been and will be accomplished—through many years of effort and the careful balancing of competing interests—will depend directly on winning and maintaining the confidence of the Adams County voters who will be asked, in the end, to approve the final annexation agreement. It is no exaggeration to say that the new airport will be built only if the people of Adams County believe that noise will not be a problem.

Legitimate noise control and mitigation actions at Stapleton, including the imposition of the Airport Noise Limitation Program (ANLP), therefore serve three critical purposes: First, these actions will keep current conditions from worsening and bring some relief to those most severely impacted by noise. Second, these actions provide the basis—the *quid pro quo*—for Adams County's acceptance of new runways and other interim improvements at Stapleton. And finally, these actions will demonstrate in a meaningful and convincing way that those responsible for governing the operation of both Stapleton and the new airport—Denver and the FAA—can and will carry out their responsibilities in an environmentally acceptable manner.

II. THE STAPLETON ANLP IS A VALID EXERCISE OF THE AIRPORT PROPRIETOR'S AUTHORITY

In complaining about local noise restrictions such as the Stapleton ANLP, the air carriers and their industry associations have asserted that the law governing airport proprietors' restrictions is vague and contradictory, that "a patchwork of contradictory and/or exceedingly complex court decisions" offer "no uniform standards" applicable to those restrictions. These rather self-serving comments bear little relationship to the facts and come from airlines intoxicated with the notion that deregulation somehow conferred upon them an absolute right to fly what they please, when they please and how they please—with no interference from the communities which they serve and whose facilities they use.

The airlines' assertions to the contrary notwithstanding, the Congress and the courts *have* formulated a well-crafted body of law concerning the rights of airport proprietors to control and regulate the use of their facilities. The law provides that the federal government has preempted certain areas of regulation governing airports and aircraft. Thus, for example, the FAA is vested with the exclusive authority to regulate the use of navigable airspace, to control the flight of aircraft, to regulate individual aircraft noise emissions, and to regulate the routes and services of air carriers.

The law also clearly spells out the airport proprietor's obligations and authorities: airport proprietors are responsible for ensuring that airport noise impacts do not unduly impinge upon the airport's neighbors, and they are empowered for that reason to establish requirements as to the permissible level of noise at their airports. These federal guidelines have been set by the Congress (with the leadership, indeed, of this Committee), applied by the courts and affirmed by the agencies.

The Congress helped to establish the framework of Federal and proprietors' responsibilities in 1968 and repeatedly has refused to alter it.

Earlier court cases addressing the problem of aircraft noise had helped to provide a basis and a rationale for the careful delineation of federal and local responsibilities adopted by the Congress, and many disputes concerning airport noise restrictions have been heard and decided in the lower federal courts since the Supreme Court decision in City of Burbank. This body of case law is uniform and consistent in two important respects. First, in no published case—not one—has an airport proprietor's noise restriction been struck down on the grounds of preemption under sections 307, 611 or 105(a) of the Federal Aviation Act.

Second, the lower courts properly have limited proprietors' power in this area: According to lower federal court decisions following City of Burbank, regulations established by an airport proprietor which seek to maintain at acceptable levels the noise created by aircraft using the airport must be reasonable and may not be arbitrary or unduly discriminatory among airport users. These tests have been applied by the courts with uniform results: where a restriction has been found to be reasonable, nonarbitrary and nondiscriminatory, it has been upheld.

Finally, prior to the regime of the current FAA Administrator and his General Counsel, neither the Department of Transportation ("DOT") nor the FAA had found the law regarding proprietors' rights uncertain or its consequences unsettling. Indeed, Secretaries of Transportation—beginning with Allan Boyd, through Brock Adams and including Secretary Dole—consistently have disavowed federal preemption of a local airport proprietor's responsibility for establishing permissible levels of noise.

In sum, the Congress, the courts and the agencies repeatedly, consciously and deliberately have affirmed a regulatory framework whereby airport proprietors have the power to regulate airport access and use—within reasonable limits—in order to limit the noise created by aircraft using the airport, recognizing that the control of flights through the navigable airspace is an area totally preempted by the federal government.

This clear and concise public policy demonstrably has provided a successful basis for balancing local concerns over aircraft noise with the national interest in promoting interstate commerce.

III. THE CONGRESS NEED NOT AND SHOULD NOT CHANGE THE LAW

The air carriers and the FAA have become frustrated with what they view as an alarming proliferation of local airport noise restrictions. They believe that these rules—like the Stapleton ANLP—have no place in a deregulated industry environment, unnecessarily complicate the carriers' scheduling and fleet assignment tasks, and threaten to wreak havoc upon the national air transportation system. Presumably, they hope that the Congress will rescue them from the burdens of these restrictions by changing the law to limit proprietors' rights.

The Congress need not and should not change the law. There may be a lot of things wrong with our air transportation system today—a lot of things which need to be fixed; proprietors' rights is not one of them.

There are several important reasons why the Congress should refuse to change the law. First, there has been no abuse of proprietors' rights. Airport noise restrictions, certainly those which possibly could be viewed as onerous, are relatively rare; few airports have imposed them, and only Denver and Minneapolis among the principal hub airports have adopted or are close to adopting significant restrictions. Moreover, these rules are not the random acts of willful proprietors; those proprietors which have imposed noise restrictions have done so for the good reason that the environmental capacity of the facilities which they own and manage has been or is about to be exceeded. Typically, these airports are situated too close to where people live to tolerate greater frequencies of noisy operations.

Although deregulation may have conferred on the airlines a basic right to leave and enter markets at will, it did *not* confer a concomitant right to increase operations to or beyond the capacity of any airport where a carrier decides it would be convenient to locate or expand a hub. Carriers must begin to focus on the public sector costs of providing certain services in particular places, and reasonable noise restrictions are a proper way for proprietors to impose those costs.

Second, there is no evidence that the national air transportation system has been or will be disrupted by the rules which have been imposed. Cries of alarm from the carriers do not constitute evidence of disruption, and moderately increased difficulty in scheduling aircraft does not rise to the level of an unreasonable burden on interstate commerce. No such evidence has been adduced in Denver, for example, and it is difficult to imagine how the requirements actually imposed upon the carriers in Denver could be held to constitute an unreasonable burden on interstate commerce. In any event, the courts have demonstrated no reluctance or inability to strike down those rules which have been shown to impose unreasonable burdens on commerce or to unreasonably discriminate among carriers.

Third, increased federal preemption or intervention, which has the effect of preventing proprietors from devising reasonable and innovative solutions to the airport noise problem, also will constitute an expensive assumption by the federal government of the liability for damages from excessive noise.

Finally, local proprietors are in the best position to determine what the acceptable noise levels should be in a given community. Different communities will set different standards for acceptable levels of noise, will pay different prices in terms of noise impacts for different levels of air carrier service, and will prefer different methods for assuring that their standards are met.

No one could craft a national standard that would fit all of the various airport situations across the country. Such a standard inevitably would be too weak for some communities and too strong for others. Furthermore, the federal government is in no position to substitute its judgment for that of airport operators on a case-by-case basis. Airports are locally-sited, locally-managed and increasingly locally-financed facilities. It would make no sense and would be unjust to strip the power to deal with noise or similar access or capacity problems from the local officials who must satisfy local needs for service, deal with local airport impacts, and pay for the adverse consequences of them.

It is fair to observe that if the Congress does not change the law, the solutions to local airport noise problems will continue to be somewhat *ad hoc*; but this is because the problems themselves are *ad hoc*. The fact is that different airports *do* have different capacity, access and noise problems which require *different* solutions. This may mean that the rules will not be uniform, but uniformity for its own sake has little merit.

Under existing law, which allows the reasonable exercise by proprietors of their rights to restrict noise, the concerns of local communities and the needs of interstate commerce have been and can continue to be balanced wisely and well.

IV. CONCLUSION

The dividing line between federal and proprietor regulation at airports has been established clearly by the Congress and has been applied consistently and fairly by the courts to different sets of facts. As a result, a healthy balance—one which does not appear to threaten the national air transportation system—has been reached in an area of enormous potential conflict. This balance is evidenced by the progress and cooperation which has been achieved in Denver with respect to both Stapleton and the new airport. The Congress should not tamper lightly with that balance.

This does not mean, however, that the potential for enormous conflict should be ignored. Airport noise is a real problem, affecting millions of people throughout America. At a time when the capacity of our system has been stretched to its limits, when new airports need to be built and new facilities added at existing airports, the noise problem must be addressed if we harbor any hope of meeting these challenges.

The increasing incidence of noise protests, disputes and resulting restrictions call for a constructive and conciliatory approach from the Federal Aviation Administration in the context of existing law. The FAA should increase its level of assistance in the development of overall noise control strategies at individual airports and should work more closely with proprietors to implement those strategies.

The FAA should cooperate with individual airport operators—as it has been asked to do in Denver—in an effort to maximize capacity while minimizing adverse noise impacts.

And finally, Mr. Chairman, the Congress should ensure that a significant and increased portion of the amounts annually authorized and appropriated for FAA programs will be provided to airport operators to assist them in mitigating adverse noise impacts.

The lesson of the Denver experience is that these steps, coupled with the preservation of proprietors' rights to impose reasonable noise restrictions, will do more to enlarge the capacity of our national system, at less cost to the federal government, than any other alternative which has been suggested.

CONGRESS OF THE UNITED STATES,
Washington, DC, March 18, 1987.

Hon. DONALD ENGEN,
Administrator, Federal Aviation Administration, Washington, DC.

DEAR ADMIRAL ENGEN: Thank you for meeting with us and with representatives from the City and County of Denver and Adams County on February 19. We welcomed your comments and those of Robert Donahue, Paul Galis and Leonard Geruzzi regarding the importance of the new Denver airport to the national air transportation system.

It is a measure of the commitment of the Front Range communities to the construction of a new airport that Denver and Adams County and its cities have worked together on site selection, and are cooperating closely in the planning phase of the project.

We were also pleased with the tenor of your staff's remarks at the February 19 meeting that the new Aircraft Noise Limitation Program (ANLP) at Stapleton International Airport is not an unreasonable burden on interstate commerce. As you know, the ANLP has been promulgated by Denver in fulfillment of its obligations under a recent intergovernmental agreement with Adams County. Support for the new airport among Adams County officials and voters depends in part on their confidence in Denver's ability to control noise.

The agreement just concluded between Denver and United Airlines, which will avoid litigation by United, illustrates Denver's cooperative approach to resolving the noise issue. We believe that FAA participation in the likely Continental Airlines litigation challenging the ANLP could make it more difficult to obtain support for the new airport project during the crucial period prior to the Adams County vote on annexation.

If your concerns about the ANLP suggest a different course in the future, we would appreciate being advised and trust you will consult with us. We stand ready as a delegation to continue our efforts to ensure that the new airport is completed as soon as possible.

Sincerely,

PATRICIA SCHROEDER,
DAVID SKAGGS, M.C.
HANK BROWN,
DAN SCHAEFER, M.C.
BEN NIGHTHORSE CAMPBELL, M.C.
JOEL HEFLEY,
Members of Congress.

U.S. SENATE,
Washington, DC, April 9, 1987.

Hon. DONALD ENGEN,
Administrator, Federal Aviation Administration, Washington, DC.

DEAR ADMIRAL ENGEN: Thank you for meeting with us and representatives from the City and County of Denver and Adams County on February 19. We welcomed your comments and those of Robert Donahue, Paul Galis and Leonard Ceruzzi concerning the importance of the new Denver airport to the national air transportation system.

It is a measure of the commitment of the Front Range communities to the construction of the new airport that Denver and Adams County and its cities have worked together on site selection, and are now cooperating closely in the planning phase of the project.

The ultimate success of this effort depends in large part on maintaining the level of trust and cooperation which has been achieved among the local jurisdictions and ensuring that the actions and policies of the Federal Aviation Administration continue to encourage those positive relationships in Colorado. In this regard, we were pleased to hear from Mr. Ceruzzi during our February 19 meeting that the FAA does not now plan to participate in any legal challenge to the new Aircraft Noise Limitation Program (ANLP) at Stapleton International Airport.

As you know, the ANLP was promulgated by Denver in order to provide environmental benefits to Denver and Adams County residents and fulfill certain of its obligations under a recent intergovernmental agreement with Adams County. This agreement and the ANLP have been important building blocks in the development of the cooperative relationship between Denver and Adams County which is so critical to the success of the new airport effort. We are pleased that the FAA recognizes the importance of that relationship.

If there is any change in the FAA's intentions regarding the ANLP because of a perceived, undue burden on interstate commerce, or should you have any concerns with respect to any other important aspect of the new airport effort, we trust that you will consult with us.

Again, thank you for the opportunity to discuss these important issues. With best wishes,

Sincerely yours,

William L. Armstrong,
Timothy E. Wirth,
U.S. Senators.

Senator **Ford**. Thank you, Mr. Cutler. I have two or three questions I'd like to ask of this panel. It's been very interesting. I think we have a pretty good mix here this morning to give us at least an overview of the problems that are being faced and some of the things that we may have to deal with.

I'll start with Mr. McDaniel. You stated it is the FAA's view that airports which have used federal funds, and you underscore that, we always have carried the stick with federal funds, and I admire some states that tell us to take the stick, but should not, and I quote you, I think, "unreasonably constrain operations."

In your opinion, will the proposed noise rule for Stapleton unreasonably constrain operations there?

Mr. **McDaniel**. I can't answer that directly, Mr. Chairman. We do have that rule under review at this moment in time. We have called to the City of Denver's attention several concerns that we have with regard to the way that the rule might operate. And there is some potential that in fact there might be an unreasonable restriction, but we have not reached a conclusion regarding that.

If I could depart from Denver for just a moment to talk about a similar but not identical rule which was introduced in Boston. The effect of that rule is to require a larger share of Stage 3 aircraft operating into Boston than are available in the nationwide air carrier fleet.

Now if such a restriction were to apply nationwide, it would be physically impossible to comply with that restriction, because there are only, let us say, 25 percent of the aircraft which are presently Stage 3. The Boston rule would require about 35 percent Stage 3 operations into Boston. That sort of approach cannot compound itself across the nation.

And so we are concerned that we not enter into a system where one airport reduce noise at their airport at the expense of some other airport. And that is a concern that we have with regard to the nationwide system.

Senator FORD. Has the FAA intervened with any other airports, with their operating restrictions?

Mr. McDANIEL. Yes, we have. We intervened with San Francisco, which imposed a limit on the type of Stage 2 aircraft which might operate there. That presently is under review before an Administrative Judge.

We have intervened in the case of Long Beach, which is also under——

Senator FORD. Let me ask you what you mean by "intervene" now.

Mr. McDANIEL. That means that the Federal Government has entered into action against the airport operator with regard to the limitations on operations that——

Senator FORD. Are we talking about legal action?

Mr. McDANIEL. Yes, sir.

Senator FORD. All right. You weren't quite clear. I had to get you to say that you were involved in court with them.

Mr. McDANIEL. Yes, sir. There are a number of other cases around the country where we have been involved, and I'd be happy to provide a complete copy of that for the record, if you'd like.

[The following information was subsequently received for the record:]

LOCATIONS WHERE FAA HAS INTERVENED IN AIRPORT NOISE MATTERS THROUGH COURT ACTION

1. San Francisco International Airport, CA.
2. Long Beach Airport, CA.
3. Westchester County Airport, NY.
4. Republic Airport, East Farmingdate, L.I., NY.
5. South Lake Tahoe Airport, CA.

Senator FORD. If you would do that, Mr. McDaniel, I'd certainly appreciate it.

So you are saying here that if the trigger of the noise restrictions on June 5th, in the opinion of FAA, is somewhat restrictive, or you feel like it cannot be carried out, that you would feel free to intervene in a lawsuit or assist in a lawsuit, or join in.

Mr. McDANIEL. As you know, Senator, nothing in the government is quite that easy. The FAA would recommend to the Secretary of Transportation who would then consult with the Department of Justice before any such intervention was made.

Senator FORD. All right. I wrote some notes here, Mr. Spensley. You talked about cargo, which has not been included with passengers, but the air-planes are there and they take off and land, and that sort of thing. How much cargo do you have out of Stapleton and how many flights and what time of day do they usually land and take off?

Senator FORD. That's fine. If you would furnish this for us.

[The following information was subsequently received for the record:]

According to the records kept by Combs Gates, (which is the only source that distinguishes cargo from other aviation activities), cargo operations constitute an average of 80 operations five days per week. The following data illustrates the amount of cargo operations compared to the total operations at Stapleton during the first three months of 1987.

Month	Total operations [1]	Cargo operations
January	45,131	400
February	41,215	400
March	45,557	400

[1] Total aviation operations include 1) air carriers, 2) charter aircraft, 3) general aviation, and 4) military operations. Air carrier operations includes passenger and cargo service.

Mr. SPENSLEY. I'd be happy to do so.

I'm guessing there are about 12 to 15 flights a day of cargo operators, of which probably about 20 to 30 percent are nighttime flights. I will check those figures. That's just an estimate.

In the course of working with the noise rule group, and the cargo operators were a part of that, there was a strong feeling that, as one might expect, they felt that they were of a different character than the commercial airlines, inasmuch as they depend very heavily on nighttime operations and connections with a larger distribution system.

The noise rule group participants felt that we ought to deal with them separately. We are in the process, as I mentioned earlier, working towards a rule that will also apply to the cargo operators on their own basis.

If you will permit me, Senator, I'd like to answer the question you raised to Mr. McDaniel about the effect of the Denver noise rule, and in part respond to a couple of comments both he and Mr. Hirst made.

Both of them, or at least Mr. Hirst, emphasized the concern about local rules in terms of stage limitations, operating restrictions, nighttime or daytime restrictions, or slots, and so forth. The Denver rule is not characterized by any of those attributes. Even though it has a local perspective only, I think the noise rule group best demonstrates the fact that we've tried to take a very responsible and balanced approached to developing that rule.

In fact, we recently requested, and the Airport Operators Council International responded by forming a legal subcommittee, to help address some of the inadvertent inconsistencies in several of the local rules that have been promulgated. In fact, George Doughty, our Aviation Director, has sent a letter to the FAA's General Counsel requesting that we also have an opportunity to sit down with them and discuss any sort of inadvertent problems that they see. I would like, with your permission, Mr. Chairman, to enter that letter into the record, as well.

Senator FORD. We'll be glad to have it.

[The following information was subsequently received for the record:]

City and County of Denver,
Denver, CO, March 24, 1987.

E. Tazewell Ellett, Esq.,
Chief Counsel, Federal Aviation Administration, Washington, DC.

Dear Ted: One of FAA's traditional concerns concerning aircraft use restrictions proposed or imposed for noise mitigation purposes by air carrier airport operators is the possibility of a so-called "cumulative burden on interstate commerce" resulting from inconsistent provisions in use restrictions in different communities.

On behalf of the City and County of Denver, and quite likely other hub airport operators, I would request the assistance of your office to meet with airport representatives to discuss ways that such inconsistencies in existing/proposed use restrictions could possibly be minimized or eliminated. For example, are there complexities burdening interstate commerce that could be eliminated in the theoretical flight of a Stage 2 aircraft from Boston-Logan to Stapleton (under its fleet mix rule) and ending at Burbank?

Ideally, FAA might work with airports to develop non-binding guidance on the following kinds of issues:

1. The number of days the airlines need in advance of implementation of new use restrictions for fleet planning/OAG notification purposes.
2. Possible inconsistencies in noise metrics being used or considered for use by various airports in drafting local use restrictions.
3. The necessity or advisability of an "after-market" for the redistributing of allocations of "transferable noise rights."
4. Other issues.

On our part, the City and County of Denver would like to be assured that it has done all it reasonably can to prevent any unnecessary complexity in the scheduling and use of airline aircraft between Stapleton International Airport and other major airports in the national system.

If you would be interested in pursuing this approach, an informal meeting might be held to discuss these items during the days of the AOCI Legal Committee meeting already scheduled for Palm Springs, California, (Monday, March 30, through Wednesday, April 1). Attorneys from many interested airports are already planning to attend that AOCI Committee Meeting, and I understand that Len Ceruzzi of your office is also scheduled to be in attendance.

We would be pleased to attempt to assemble representatives of interested airports for initial discussions with Len if an informal meeting in that time frame would be acceptable to you.

Very truly yours,

George F. Doughty,
Director of Aviation.

U.S. Department of Transportation, Federal Aviation Administration,
Washington, DC, April 23, 1987.

Mr. George F. Doughty,
Director of Aviation, Denver, CO.

Dear Mr. Doughty: I regret the delay in responding to your letter of March 24, but I did not receive it until March 30. On receipt of it, Mr. Ceruzzi of my staff was contacted by phone in California where he was attending the AOCI Legal Committee Meeting and directed to meet with you to discuss your letter. He informed me that you were not at these meetings, but he did take the opportunity to discuss the concept you raised with Mr. James Spensley, Director of the New Airport Office for the city of Denver.

Your observation is both cogent and timely. The FAA is very concerned with the possibility of a burden on commerce emanating from various disparate and inconsistent use restrictions imposed on airport users by airport operators at diverse locations around the country. Understandably, airport operators tend to focus on immediate action in response to the complaints of local citizens. In doing so, the focus is on the aviation activity at a particular airport as the airport operator attempts to create local use restrictions designed to achieve a locally acceptable result. Our concern is that consideration of systems impacts are frequently missing from these deliberations, and any inconsistencies in the various local use restrictions only tend to exacerbate the problem.

Addressing these issues was a major purpose behind the Notice of Proposed Policy on Airport Access and Capacity issued by the FAA. As you know, the proposal generated substantial reaction and response, much of which has been helpful in our consideration of policy in this area. We are also aware of the ongoing effort of an ad hoc aviation industry task force called together by Mr. Reilly, the Executive Director of AOCI, to address some of these issues. As you may know, it is my understanding that at the recent AOCI Legal Committee Meeting, that committee decided to create a special committee for the purpose of discussing, both among its own members and in consultation with the FAA, some of these same questions and issues.

The FAA has been, and remains, ready and willing to meet with any persons interested in developing answers in this very complex and difficult subject area. We are concerned about meetings which would exclude any major segment of the aviation industry, such as airport users, who are the persons most directly affected by airport use restrictions. With the foregoing in mind, I would be willing to do whatever I can to assist in the development of constructive dialogue to achieve the resolution of the many issues in this area.

My experience has been that consideration of broad or sweeping proposals frequently results only in a statement of general principles. Your suggestion that specific issues be targeted for consideration is excellent. For example, your point that inconsistencies in the various noise metrics being used or considered for use by various airports should be among the topics for discussion is a good one. I am concerned, however, that any action undertaken not be duplicative of the work currently underway by the AOCI/ATA Industry Task Force or the effort of the AOCI Legal Committee. If you are able to work out a way to coordinate these efforts, the product of these multiple efforts could be very beneficial.

Sincerely,

E. Tazewell Ellett,
Chief Counsel.

Mr. **Spensley**. So I think in part we have addressed some of the aspects that Mr. Hirst has raised.

We did a preliminary assessment of the Denver noise rule and found that based on December 1986 operations that the airline most affected by this rule would simply have to move two nighttime flights to two daytime flights, out of 220 flights a day, in order to comply with the rule. We think that's a rather diminimus affect in terms of what that rule does. And that, again, is based on a December 1986 schedule.

Now, obviously, the airlines are looking to increase their operation schedules. But I want to emphasize this is not based on limitations of Stage 2 airplanes. As I tried to point out at the very beginning, there is plenty of flexibility for them to substitute aircraft to meet the rules.

Finally, I want to just comment on Mr. McDaniel's testimony with regard to the Part 150 study. We have, in fact, conducted numerous studies of noise impacts at the existing airport, the most recent of them in 1983, which was a joint effort among all of the communities and the FAA. The FAA partly funded that study, which was equivalent to a Part 150 study.

We are undertaking a Part 150 study now at the existing airport. This rule, as I'm sure the record will some day show, has been supported substantially by a considerable amount of work in looking at noise mitigation measures, and many of those measures have already been implemented at Stapleton, including the preferential runway use, and other mitigation measures.

Senator **Ford**. One other question. If anybody wants to jump in, that'll be fine. We might get a little debate here this morning, but we can't let it run too long. We're not sure if the airlines will be running on time, so we want to get to the airport early.

Commissioner Cramer said a few moments ago, Mr. Spensley, that it would be, I believe he said, 35,000 acres total, and I believe you said 50,000.

Mr. SPENSLEY. No, Mr. Chairman.

Senator FORD. It's two separate.

Mr. SPENSLEY. Yes.

Senator FORD. The 25,000 acres for the airport, and then a 25,000-acre buffer, or mile buffer, I'm not sure.

Mr. SPENSLEY. Let me say the 25,000 acres is a rough estimate for the full build-out of the new airport, which would be up to 35 square miles, and it is the area we are looking at to purchase in fee for operation of the airport.

We also want to purchase the residential development rights only of another 20 to 25 square miles outside of the airport area. At this time, we don't know the exact size of that. We're estimating something on the order of ten to fifteen thousand acres. Perhaps Commissioner Cramer was adding those two figures together.

Senator FORD. What do you buy when you buy residential rights? What have you purchased?

Mr. SPENSLEY. Well, Eliot wants to answer that.

Mr. CUTLER. Since the rights are going to be purchased in Adams County, I feel an obligation to answer.

The theory, Mr. Chairman, is that the bundle of property rights typically includes the right to build a house on a parcel of land. With Denver, we have sought to figure out how we can avoid a recurrence of the problem which we have at Stapleton and so many other airports around the country today, and that is the encroachment of residential use up to what was once a new airport surrounded by an unpopulated area. One of the problems is that you can't reliably prevent such encroachment by an governmental agreement, because in most states, including Colorado, you cannot bind the future actions of a legislative body—that is, a zoning board or a board of county commissioners—in an intergovernmental agreement.

So, for example, an agreement between Denver and Adams County that said that it's an obligation of the Adams County Commissioners never to approve residential use in a particular area would not work. It's not enforceable.

So what we have come up with, we believe, is a mechanism by which the City and County of Denver will purchase either from willing sellers, or if necessary by condemnation, the residential development rights—that is, that piece of an ownership interest which allows one to build a house—in the area impacted by, or projected to be impacted by, 65 ldn noise contours from the new airport. Denver would hold those rights—an easement, if you will—with respect to that land. That land could be used for any other lawful purpose under the rules of the jurisdiction in which the land is located, presumably Adams County, until such time as two successive noise studies had determined that the land was no longer impacted by 65 ldn noise, and was not projected to be so impacted. At that time, Denver would be obligated to extinguish its easement and give up its rights, and that land then could be developed by the current land owner for residential purposes, if he so chose, and if the jurisdiction's rules allowed him to do so.

I might add, sir, that we have not finally agreed on this mechanism. We have been discussing it for quite some time. I think it's reasonable to assume that it is the mechanism we will use.

Senator FORD. While you have the microphone, let me just ask you a question. You've advocated that Washington do nothing. That we leave the law as it is, not pre-empt, if I can use that term. With that situation, and believing as you do, can FAA work with separate rules at each locality and still insure a national air transportation system?

Mr. CUTLER. Yes, sir, I believe so. First of all, I don't want my testimony to be construed as implying that we believe that all of Washington should do nothing. We do believe that the law should not be changed, but we also believe that there is a lot that the FAA can do in terms of working with individual airport proprietors to create and implement strategies to control noise, and to do so, insofar as possible, with various proprietors in as uniform as possible manner.

We do not believe, however, that the FAA should have the authority to tell a local proprietor what it can and cannot do. If it is dissatisfied, it obviously can challenge a local proprietor's noise rule.

As to the question of whether a national transportation system can be maintained under the circumstances of a lot of tough noise restrictions at different airports, I think the answer is quite clearly "yes." Whether or not that system will function in quite the same way and at quite the same levels in various markets and city pairs as it does now is obviously an open question.

What we are suggesting, indeed asserting quite strongly, is that a perfectly appropriate, and, indeed, necessary constraint on the development of the air transportation system in America is the capacity and ability of locally-owned managed and increasingly locally-financed airports to accommodate that level and those patterns of activity.

When an air carrier decides to locate a hub in a particular market, in a particular location, it does so generally in response to what it perceives to be a market demand that would make it smart from a business standpoint to establish a hub in a particular place.

It typically does not, or at least it's arguable that it does not, devote as much attention at the time it makes that decision to that particular facility's ability over time to accommodate vast and sudden increases in carrier activity. And since deregulation and the advent of hub-and-spoke service, we have seen very sudden and dramatic increases in activity at airports like Minneapolis and Denver which were not designed to accommodate that level of activity.

Senator FORD. Well, let me take you one step further on that.

Mr. CUTLER. Certainly.

Senator FORD. And I'll stop. We're beginning to move on here with time.

We'll say that these restrictions began to take place. I'm not saying they're right or wrong. I want to stay neutral as best I can for a while. What does the limit here do to other communities?

Mr. CUTLER. That's an important question, because the courts, since 1973 in particular, have made it very clear that there are limits on what a proprietor can do with its authority in the area of noise restrictions. And one of the most important limits that has been applied by the courts is that the rule that is promulgated by a proprietor cannot have an undue burden on interstate commerce.

Now, the word "undue" is obviously quite important, and it is that word which has required the courts to balance the local interests sought to be protected—that is, freedom from adverse noise impacts—with the effect that the action taken has on interstate commerce.

There have been cases where the courts have found that the burden imposed is an undue one, and there have been many cases where they have found that it is not.

Our argument, Mr. Chairman, is that these are inherently case-by-case decisions. A rule in Denver is not the same as a rule in Minneapolis, or the same as a rule in Boston or anyplace else. These are case-by-case decisions. That's the way the Congress wrote the law, and that's the way the courts have applied it. They've applied it quite reasonably, and we would argue, sir, that that is the way the law ought to be applied in the future.

Senator Ford. Senator Wirth has some questions.

Senator Wirth. Thank you, Mr. Chairman.

First, Mr. Cutler. In his testimony, Mr. Hirst said that if we just allowed the natural processes to work by 1990 the numbers of people impacted would have declined from 38,000 to 10,000 people, and, therefore, the rule is not necessary. Is that . . .

Mr. Cutler. I'm glad you raised that point, Senator Wirth. I wrote a note to myself about that comment. The comment, as I recall Mr. Hirst made it, was that the number would decline from 38,000 to 13,000 by 1990 simply through fleet modernization, and that in his view——

Mr. Hirst. And through other mitigation measures short of——

Mr. Cutler. And that in his view, that demonstrates that this rule just isn't necessary. Well, to me, that statistic suggests that this rule is not going to be any problem to the carriers, because all this rule does is establish a ceiling on noise at current levels. What it says is "the noise can't get worse." It doesn't say that we're going to reduce it significantly over time. It did at one point; it does not now.

And if Mr. Hirst is correct, and the noise situation at Stapleton is going to so dramatically improve in less than three years in the absence of a rule, then it's inconceivable to me that this rule—which only sets a ceiling on noise—will really constrain the carriers at Stapleton. It just doesn't add up.

Senator Wirth. Mr. Spensley, it appears to me you are suggesting that in the development of this noise standard, a number of meetings with the various airlines who are impacted were conducted.

First, could you confirm that? And, second, could you tell us how the other carriers may feel about the rule? I understand that Continental is not an advocate of this particular noise regulation.

Mr. Spensley. Yes, Senator Wirth. The Noise Rule Group, as I indicated earlier, literally met every two weeks for six months; and at every one of those meetings, there were representatives of the airlines. And I would guess, for the most part, United and Continental were well represented at all of those meetings.

We did have the Air Transport Association, and a few of the other airlines attending meetings sporadically during that six-month's period. But they, in fact, made a number of suggestions. For example, United suggested that we incorporate what they call their quiet departure procedure into this rule. And, in fact, they demonstrated on paper and in their simulators that this does have a saving of noise to certain residents around the airport area. So, in fact, we adopted that suggestion, and it is now part of this rule. United and any other airline, that uses a quiet departure procedure, can take advantage of that in terms of the way that the rule works.

Similarly, Continental made a number of suggestions which were more along the lines of a fleet-type rule that is dealing with Stage 2 and Stage 3 aircraft. And, unfortunately, the analysis proved that it did not meet the objective we were striving for, which has been described, was to put a cap on the existing noise.

So, I think to character—I'll let Ben characterize Continental's position about the rule. When we completed the process, we had a number of discussions about concerns that both United and Continental had about the rule.

United, for example, had a concern about its implementation date being too early for them. Originally, it was scheduled to take effect the first of this month, April. We postponed that until June 5 to accommodate the concerns of United and the other carriers who felt that because of labor adjustments and schedules and marketing, they could not comply.

Similarly, there were a number of other points, I won't go through them now, which were raised that we negotiated with the airlines and the affected communities. Again, this balancing was a hallmark of this process.

United at the end indicated to us in writing that it was not their intention to challenge the rule and that they could live with it.

Senator WIRTH. What about American?

Mr. SPENSLEY. Well, American did not express a viewpoint. I don't think any of the other airlines have come to us and indicated a serious problem. I have talked with representatives of Delta, TWA, and others, to explain the rule, but none of them have raised any objection to it.

Continental would be the only one that has raised a serious objection.

Senator WIRTH. Mr. Hirst, in your testimony, you spoke very eloquently about the marketplace determining what the rules ought to be, rather than having it set by some kind of an airport authority.

It strikes me that one of the segments of that marketplace, one of the markets is, in fact, the community, whether that's Orange County or Logan Airport in Boston or Denver and Adams County—or whatever. If one carries out the marketplace analysis that you provided, why isn't the voice of the City of Denver one of the elements in that marketplace, as well as Adams County? Shouldn't that also be considered?

Mr. HIRST. We certainly think it should be considered, Senator Wirth. We do not, as my friend Mr. Cutler suggested, believe that airlines should operate free and clear of all constraints, and certainly free and clear of all noise constraints.

What we do believe is that there needs to be an umpire, an arbiter, between local interests and legitimate national interests. And that local governments necessarily do not have the expertise or the perspective to draw the line in the proper place.

Mr. Spensley believes that the Denver noise is a reasonable, the Denver noise rule is a reasonable regulation. We disagree on many points, but the most critical point, I think, is one of process and not one of substance here. We're concerned about what will happen to the system in the future. We're concerned that the Denver rule will become a precedent for other rules.

If Newark, or if Atlanta adopts a similar rule, what is the court then to do about the Denver rule, which was the ultimate cause of a constraint that may have become magnified by a second generation of noise rules?

So we're very, very concerned that the courts should not become the ultimate arbiter of this local/national debate. The line needs to be drawn by a forward looking federal entity that has responsibility for balancing both sets of concerns in a reasonable view.

Senator WIRTH. That leads me to the following question. You, in your testimony, a had suggested some kind of language that would give some discretion to the FAA. Do we have a copy of that?

Mr. HIRST. Not yet, Senator. We requested and have been given permission to submit our testimony somewhat later.

Senator WIRTH. Okay. Well, maybe you could read that proposed language, and we might get Mr. Cutler to react to that. It seems to me that's the arbitration language that you were suggesting ought to be built into the statute. Is that right?

Mr. HIRST. It seems to me that it should be built into the statute, or adopted by the FAA rule.

Senator WIRTH. Could you read that? Maybe you could read the language. I know it's difficult to react to this, but maybe you've heard this before, Mr. Cutler.

Mr. CUTLER. I have, sir, many times.

Mr. HIRST. "Second, the Administrator should be directed to review existing use restrictions, and to invalidate fleet,mix,curfew, slot, and other regulations affecting airline operations, unless he finds that the regulation in question is justified on the basis that other less-restrictive alternatives are ineffective, and that the regulation is necessary to achieve significant noise mitigation."

Senator WIRTH. What's wrong with that, Mr. Cutler?

Mr. CUTLER. First of all, Senator Wirth, I must take issue with Mr. Hirst's characterization of the FAA as a forward-looking federal agency with respect to all of the matters which we have discussed this morning.

I think that the fact of the matter is that the attention which the FAA has paid in the past to the noise impacts felt in communities like Adams County and Denver has been reluctant. It has been less than what the situation would call for. And there is no evidence, it seems to me, in the record of the Federal Aviation Administration's past actions or its current policy statements that it is the Agency that one can look to with confidence to balance the concerns which we've discussed here today.

Second, there is a real question as to whether the FAA has the expertise to make the judgments balancing adverse effects on interstate commerce against the harm that adverse noise impacts can produce. One absent federal agency in this regard would be the Environmental Protection Agency. I see no better argument for the FAA to make this judgment than for the EPA to make this judgment.

Third, historically it is the courts to whom we have turned to make decisions about issues like "undue burden on interstate commerce." This is a phrase, as you know, that is loaded with meaning and interpretations which have developed over years and years. It's been argued about, defined, and so forth, and these are judgments which we don't believe the FAA ought to be in a position to make.

The FAA's activities, it seems to us, ought to be directed at helping to improve the ability of airports to manage the noise problem and to accommodate higher levels of traffic without having to resort to noise restrictions.

When an airport reaches the end of its rope, as has happened here and is happening in many other situations, it ought to be the airport's responsibility to make a judgment, subject to review by the courts, as to whether it wants to take the steps necessary to mitigate the noise impacts and pay the price for taking those steps.

Mr. SPENSLEY. Senator, could I add to that?

Senator WIRTH. Yes.

Mr. SPENSLEY. I just wanted to add to Mr. Cutler's answer. I think a harbinger of things to come in terms of looking at how the FAA has reviewed some recent Part 150 study submittals, and particularly the Long Beach case, I think will be an answer to whether the FAA is the proper body to draw that line.

There are inherent in this process, like any sociotechnical process that we're dealing with such as noise rules, a judgment about how much technical certainty is needed in order for a policy to be formulated.

The Part 150 studies reviewed by FAA have thrown the entire burden of the scientific and technical certainty of the outcome of any proposed noise mitigation measures back to the local proprietor. I think that is partly the reluctance that Mr. Cutler and I would share in that solution.

Senator WIRTH. Let me ask you a final question, which I know is of concern to a whole lot of people in this community.

If the Denver noise rule were to be thrown out, were the challenge to that rule to be successful, what would the impact of that decision be on the agreement that has been reached by Denver and Adams County for the long-term future of the new airport?

Mr. SPENSLEY. I will respond for those residents of Denver that are also concerned about this new airport and noise impacts. Mr. Cutler can answer for those in Adams County.

This noise rule and our noise approach has been one of the cornerstones of the cooperative agreement between Denver and Adams County. There's no question but that from the day we began discussions with Adams County about a new airport in May of 1984 that noise was the paramount concern.

And, as Mr. Cutler indicated, the way we deal with noise at the existing airport is going to represent an example about how Denver and its officials will deal with the noise at the new airport.

Now that's not to say we will necessarily approach the noise issue in the same way.

We do have an obligation, I might add, under the intergovernmental agreement, that if this particular noise rule is thrown out by the courts, which I don't think it will be, that we will have to develop another mechanism by which to deal with the noise issue.

So, one way or another, we are obligated under that intergovernmental agreement to deal with the noise issue.

But, symbolically, I think the importance of it can't be understated—or can't be overstated in terms of what this particular approach means in terms of the confidence that we have to demonstrate to the voters of Adams County before we get that new airport.

Mr. **Cutler**. I am frankly disinclined to answer the question, because my answer would suggest, I'm afraid, that all of what everyone has worked so hard to accomplish for many years could come to naught.

I simply will echo what Skip has said, and say that it would be more difficult for us to conclude for our clients that Adams County voters with confidence could approve an annexation of land by Denver and look forward to an airport being operated in an environmentally responsible manner.

Obviously, it will be the decision of the elected officials in Adams County and the voters, but it would leave us with a very difficult task, I think.

Senator **Wirth**. Mr. Hirst, do you want to respond to that?

Mr. **Hirst**. I'd just like to make two points, if I could, Senator.

First, I disagree with Mr. Cutler's view. It appears to us that the community of support for the new airport has grown dramatically in the Denver area over the last year, since the intergovernmental agreement was signed.

It's increased in part because of the demonstration of economic benefits that will result from construction of the new airport in Adams County and in part because of the remarkable coincidence of support among all political groups, parties, and figures in Colorado.

It appears to us that irrespective of the outcome of any litigation over the Denver rule, the new airport will go forward because of that strong base of support.

With respect to the second point that Mr. Cutler made, lingering concerns in Adams County about environmental effects of new airport development, those concerns need to be addressed, as was suggested earlier that they would be, by proper construction siting and design to form a buffer zone around the new airport, to guarantee that any reasonably anticipated level of use of the new airport will not impact populated areas.

That is the guarantee that Adams County has not a process of litigation of the kind that Mr. Cutler is proposing that we all accept as the norm.

After all, irrespective of the outcome of litigation over the Denver rule, there's the possibility under Mr. Cutler's view of how things should operate, that there will be litigation over any noise rule at the new airport. And even though litigation may fail over noise rule A, there's certainly no guarantee that litigation will not succeed with respect to noise rule B.

It seems to me that the best guarantee that Adams County has with respect to the environmental sanctity of the new airport is proper design siting and construction of the new airport and an effective federal role in mediating local noise concerns with the needs of the national system.

Mr. CUTLER. May I offer surrebuttal?

Senator WIRTH. Sure.

Senator FORD. I'm beginning to like this.

Mr. CUTLER. First of all, Mr. Hirst's use of the term "coincidence of support" really is quite inappropriate. The support that you've seen today comes as no coincidence. It comes as a result of many years of hard work, hard bargaining, compromises, and very intricate structuring of intergovernmental agreements.

And I think, as Senator Wirth well understands, progress like this does not come about merely through coincidence. It is the continuing political support of the people of Adams County that will either enable this airport to be built or doom this region to a future of inadequate air transportation. That is the fact of the matter.

Now, with respect to Mr. Hirst's argument that if there is no litigation here, there could be litigation somewhere else: That really misses the point. The point is that the people of Adams County, who are being asked to give up an enormous amount of land to host a new airport, have to be concerned not only about where the airport is located and how it's designed, but also about where and how those aircraft fly once the airport is built. That's what creates noise, not just the way an airport is designed or where it is located.

The people of Adams County need to have the confidence that Denver is willing and able to protect them and is obligated to do so by virtue of enforceable intergovernmental agreements. They need to know that the FAA is committed, as Commissioner Cramer said earlier, to maintaining the protection of flight plans which do not adversely impact the people of Adams County.

And I would suggest, finally, that if the air carriers and others expect the voters of Adams County to approve the annexation referendum, those voters need to be confident that the carriers, themselves, intend in the future to behave responsibly towards the people whose community they are about to use.

Senator FORD. I'm going to call a halt to the debate here now between the two parties.

Mr. Hirst, I was a little bit surprised at your suggestion that we would have a aviation czar. I think you had somebody in charge that would arbitrate everything, and you indicated you didn't want to. There would be no need to go to court.

How much experience have you had in the Federal Government?

Mr. HIRST. Well, I worked at the CAB during deregulation, Senator Ford, and feel very strongly about deregulated environment.

Senator FORD. Well, let me tell you, my friend, I've worked at both levels; at the state level trying to get something up to the Federal Government, and now I'm at the Federal Government trying to get something back to state. And if you deal with bureaucrats like I deal with bureaucrats, you won't have any—you'll have to go to court. I always thought you had an opportunity to go to court in this land.

If you want to appoint a reluctant czar, I'm not sure that this Senator is interested in giving one individual, the Secretary of Transportation, whoever, that kind of authority.

Mr. HIRST. Senator Ford, we certainly would not want to see a czar appointed. We do think that the process now is weighted far too heavily in favor of rules by local entities, which do not take into account national concerns.

Senator FORD. Well, I'm kind of a local fellow, myself, and it's going to be awful hard to get me off of that. I think that is where the action is located, and they have a problem. I hope I'm not flying in the face, or beginning to take sides here, but this is the position I've long held. Once we pass a law, the regulations promulgated from that sometimes removes the intent. I think if we leave as much to the locals as we possibly can and make the kind of decision that's evident here, in my opinion, I would be very hesitant to change the law, or suggest that we create office with this kind of authority and power.

I don't mean to fly into the face of your argument here, this morning, but I would be one Senator very reluctant to do that. I hope you appreciate that.

Mr. HIRST. Oh, I do, Senator. I hope you'll take a look at the testimony which we will file, because we believe there are serious costs to local communities in the form of the kind of air service they'll receive.

Senator FORD. Well, as they say down home, we'll look at every "jock and tittle" of that thing. I'll go through it.

My first and foremost desire, is getting as much information as we possibly can, trying to get as much money in the hands of communities that need it so they can move ahead.

What I don't like is when I walk into an airport, and I walk up to the gate, and there's five planes leaving at the same time. You just pray that you're called earlier instead of later, because if you're called later, you're thirty minutes late. You're supposed to be there on time, but you've got those five airplanes. I see this going on every day in several locations, and if you want the names of the airlines, I'll be glad to give them to you.

Mr. HIRST. Senator, we're concerned about the same thing. Today we're filing with the Department of Transportation a request for a rule making requiring airlines to publish, according to a standard format, a substantial amount of information, relating to consumer interests and customer service, including on-time performance.

On the basis of that publication of information airlines will then be in a position to advertise as to their competitive levels of service and will be able to hold each other honest to a much greater degree than they can do today.

Senator FORD. I understand your president is testifying next week——

Mr. HIRST. That's correct.

Senator FORD [continuing]. As relates to this. And I'd like for you to tell him, or ask him to bring with him the extra costs that would be imposed upon airlines if you have to give out the information over the telephone. It might help reduce some of our unemployment, if you can get into that. That's going to be a difficult thing to do, wouldn't it? I hope you will have that worked out in detail.

Mr. HIRST. I will see that it's done, sir.

Senator FORD. Thank you.

Senator WIRTH. Gentlemen, thank you very much. The issues that you all have brought up this morning go right to the core of what we face in terms of the airport, and I'm delighted that you were here and had a chance to have this discussion and debate in front of the distinguished Chairman of the sub-committee I hope he will get a clear sense of the kinds of issues that we're looking at here in the Denver Metropolitan Area.

Thank you very much for being with us.

Senator FORD. Thank you, gentlemen.

We have one other panel. Joseph M. Schwind, Deputy Director of Engineering, Air Line Pilots Association from Washington, and Dr. John McCarthy, Manager, Research Applications Program, from the National Center for Atmospheric Research, in Boulder.

All right, doctor, you may proceed.

STATEMENT OF JOHN McCARTHY, PH.D. MANAGER, RESEARCH APPLICATIONS PROGRAM, NATIONAL CENTER FOR ATMOSPHERIC RESEARCH, BOULDER, CO

Mr. McCARTHY. I appreciate the opportunity to provide the Committee with an update on some of our activities that concern wind shear research and operational testing.

I prepared a statement which, Steve, I believe you have; is that correct? And I'd simply like to paraphrase it just for a couple of minutes.

Senator FORD. It will be included in the record in its entirety.

Mr. McCARTHY. I direct wind shear research at the National Center for Atmospheric Research (NCAR) and have been heavily engaged in activities with the Federal Aviation Administration for some years to deal with the low-altitude wind shear problem.

Since 1982, I have directed for the FAA about three research programs in which Denver Stapleton International Airport has been a principal focus of our activities, although the activities have extended beyond Stapleton.

The Chairman of the National Transportation Safety Board has recently stated that loss due to wind shear is the single largest cause of air carrier death in the United States. And we've had, of course, a number of very tragic accidents in recent years to amplify that, unfortunately.

I wanted to cover this very briefly with a few words and then a few slides to amplify some of the activities that are pertinent not only to the national program but to Denver.

I have recently just completed being involved in the Windshear Training Aid, which is a training syllabus program that will become the standard for all pilot training in the United States. The work was reported out to the FAA about two months ago, and it is designed to provide two main things for pilots.

One is a greater respect for the nature of the hazard. Pilots seem to have a continuing propensity to get into weather that we don't want them to be in, and the training program is designed to emphasize that, as well as give them an aid so that they can in many cases recover from an encounter with a hazardous wind shear.

However, there are many wind shears that no pilot can possibly survive if he gets into one. And because of that, the work has been directed towards protection and warning.

There exists at approximately 80 airports in the United States something called the low-level wind shear alert system (LLWAS), which is an anemometer wind-vane based system that, unfortunately, doesn't detect microbursts very well, which is the most serious hazard.

We've been involved very heavily in bringing a much-improved system to the country, and Denver has been selected as the site for operational demonstration of this system. The operational demonstration will occur this summer. I'll show you a couple of slides about that.

We have been working very closely with MIT Lincoln Laboratory, using Terminal Doppler Weather Radar as a more effective approach to the problem, at Denver, Memphis, Huntsville, and now we'll be returning to Denver in a month. Beginning on the 18th of May and extending until about Labor Day of this year, and an equivalent time next year, the automatic detection work of Doppler radar will be tested and demonstrated.

Denver has been chosen for several reasons. One is we believe that the microburst hazard is very severe here. The air traffic density is also high, so that we can get a lot of feedback from the operational community as to the effectiveness of these new systems.

I'm very excited about this system, because it not only will provide mitigation of wind shear due to much-improved warnings, but the use of Doppler radar also impacts the ability to see and understand and detect and deal with hazardous weather. And, as you can tell from most days at Denver, weather is a very big issue here.

So we think that the Doppler radar system will have a definite effect on decreasing the delays due to weather, which is an issue that's very much on our mind.

The procurement of Doppler radar for the nation's major airports is a major issue in terms of the financing of it. Whereas, I believe the FAA has great interest in seeing this system implemented (and some other systems that I'll mention) there needs to be continuous pressure on the part of the Congress to make sure that the funding required to field these systems does occur. And I believe it's very important.

There is additional work, which I won't spend much time on, regarding the development of airborne detectors, but I think it's about at least five years before such a system gets out of the developmental stage, so that we have to concentrate on training and ground-based systems in the near term.

The objective of all of this, of course, is to make low-altitude wind shear a 20- to 30-year event instead of an 18-month event. To have major air carrier accidents of the frequency that we're having due to wind shear is just totally unacceptable to me as a scientist. I believe that by approaching wind shear as we are, we can really effectively all but eliminate the hazard.

Finally, to make my comments relevant to the rest of this hearing this morning, the University Corporation for Atmospheric Research, an organization that we're associated with, has just entered into a contract with the City and County of Denver to bring the understanding of the weather and some of the systems that can be used to deal with severe weather hazards in Denver into the planning process of the new airport.

So, we will be entering fairly serious discussions and activities.

So, if you'd like I'll show you some slides that'll give you a sense of what we're doing.

The hazard that we're addressing, Senator, is the low-altitude wind shear. The event that represents about 95 percent of the hazard is a microburst formed by a downdraft coming out of the cloud base, and horizontal outflow. And essentially all of the major wind shear accidents that involved air carrier aircraft have involved an aircraft that flies through this event.

We've done a great deal of research to indicate that this downdraft and horizontal outflow associated with it is extremely hazardous. The event only lasts about 15 minutes from the time it begins to form until it dissipates. In this time period it is only severe for about two or three minutes. So that the event is very, very quick in terms of a weather phenomenon, extremely quick and extremely dangerous.

It also produces something called a horizontal roll vortex. Unfortunately the flight of Delta 191 at Dallas/Fort Worth entered a horizontal roll vortex, and it was a very serious situation.

This is a photograph of what one of these vortices looks like. And again it's particularly hazardous for an aircraft. Now, a lot of the work that we're doing in pilot training is to emphasize that pilots stay out of classical severe thunderstorms. This happens to be an Oklahoma version of one where I used to do a lot of my work. Unfortunately, many microbursts are very benign appearing.

This is one over Stapleton Airport taken in 1982, and the cloud base is 12,000 feet above the ground. The rain has evaporated before reaching the surface, and there is a 65-knot wind shear on this runway at this time, so that it appears very benign, but it is in fact enormously serious.

From one of our operational programs at Stapleton here's a picture of a microburst taken from the terminal, the air traffic control tower, and it is probably a microburst that is similar in appearance to what we think occurred to Delta 191 at DFW Airport in 1985.

I'm going to show you a few pictures of a microburst near Wichita, Kansas, which shows a very innocuous rainfall coming out of a cloud. Two minutes later the rain shaft is on the ground and still doesn't look particularly severe. But just two minutes later we begin to see the classical definition of a microburst, and again we think this is a similar picture to what many aircraft and pilots might have been able to see.

This is a Doppler radar measured wind change in about 30 microbursts, and the average value shown in the middle of this blue line here is about 45 knots differential. Unfortunately, half the microbursts are more severe than that. We had one here at Denver which was 94 knots and we think there was a 214-knot differential at Andrews Air Force Base.

So you don't have to leave Washington to find very severe wind shear and, unfortunately, a number of accidents have occurred with just average microbursts. So the hazard is very, very severe, and the wind shear training program has been very important.

The strategy is to emphasize avoidance of all known wind shear, and recovery from the wind shear if you accidentally get into a wind shear. This is the basic model of flight crew actions which the FAA intends to standardize now that this wind shear training program has been reported. The model shows a continuous monitoring of evaluating the weather, and always asking the question every single flight and every moment of a flight in the terminal area, "Is it safe to continue?" And the answer is "no" to "avoid," and we've given pilots all the information we can for them to make an avoidance decision, but recognizing that without a successful detection of wind shear you have to learn the recovery technique which is shown here at the bottom. I think I have a slide that emphasizes avoidance.

And then, finally, I won't go into detail here, but the way to get out of a wind shear is to apply all the possible thrusts you can get, and pitch up toward 15 degrees and maintain configuration.

We think if successfully applied early enough approximately 75 percent of the microbursts can be successfully transited with this technique. Unfortunately, it has to be applied precisely and perfectly to do that. Furthermore, if you get into some microbursts, even with this technique you're not going to get out alive. So, that's the critical nature of it.

This is an example of a takeoff; a normal takeoff is the white line. If you encounter a wind shear, which is so severe the technique won't work or if you don't use a technique of pitching up 15 degrees, you follow the yellow line, which unfortunately represents premature impact with terrain, or crash. For example, Pan Am Flight 759 followed this particular trajectory in New Orleans in 1952.

The green line is the place that you might be able to go if you apply the technique correctly. The landing procedure is normally to follow the white line of the runway. The yellow line is Delta 191, which is impacted very well short of the runway. And the green line is the route that the recovery technique may provide. So, that's why it is so important the pilot have that recovery technique.

I'm now going to spend a few minutes on microburst detection and warning. Here at Stapleton Airport with the old wind shear alert system that was operating until 1985, the distance between the sensors was a lot larger than the size of the microburst. That is exceedingly bad news, because the net that is set up around the airport is so course that the microburst slips through.

And so the old system is quite defective in the detection of microbursts. It's operating at every airport right now except Denver and New Orleans where the number of sensors has been doubled to improve the resolution of the system.

Another problem with the system is that the display is rather crude in the sense that when a wind shear occurs on the airport the controller must read a huge number of numbers to the pilot and the pilot has a substantial confusion factor in trying to interpret what these numbers mean.

With the new LLWAS system we are defining the new runway corridor where this represents the runway and one, two, three-mile final or departure. The new message will identify the wind shear as a microburst wind shear, and will actually give the wind speed change expected along the runway access, and the location, and whether the wind shear is increasing or decreasing in intensity.

The new warning this summer will be something like, "Microburst wind shear. Expect 30-knot loss one-mile final, increasing in intensity," and we think the confusion factor and the precision of this type of product will be much enhanced. There will also be at some point a geographically based view of the whole airport, and every time you see red here it's actually an identified microburst. This will be used by the controllers for planning runway configuration.

This is a picture of Doppler radar at Stapleton taken a few years ago with a lightning bolt in the background to emphasize that we have lots of thunderstorms and snow storms here.

This is an unambiguous identification of a microburst with Doppler Radar. When you look at a Doppler Radar and look at the wind speeds with a Doppler Radar, only a microburst gives this particular pattern. And that's why we've established for the FAA that Doppler radar provides, we think, by far the best detection capability. And when you see it there's no mistake about it, it's definitely been detected. It has an enormous success capability.

The name of the game now, Senator, is to develop an automatic analysis system that provides controllers and pilots definitive information; first controllers and then through the Mode-S uplink to the cockpit. We're going to use meterologists to carefully track the nature of this automation to make sure that it's working very effectively before the human observer disappears from the system and leaves it fully automatic. It must be automatic because if the thing is only severe for two or three minutes in an otherwise eventless day it would be impossible, in my view, to develop a human system to monitor airports without artificial intelligence systems that provide this product.

So, finally, the FAA is developing a very extensive program that I'm optimistic will mitigate the problem. However, it will require money and the pressure to maintain the protection that we need at the airports that in my view must be well maintained.

I have two more pictures for graphicness. This is Continental 426 at Denver off the north end of the airport after crashing in 1975. This is about the second accident that we knew involved a serious wind shear problem. This one fortunately did not catch on fire, so there were no serious injuries with this crash.

My last picture is a very graphic picture taken by one of the firemen in the fire truck heading down to the aircraft, which is off the end of the runway here. At this time we really didn't understand wind shear at all. What is really exciting about the picture is that there is a perfect microburst in the background. Nobody realized at the time that what this picture shows is the whole thing.

Here's the downdraft. Here's the vortex curl on both sides. And the whole picture is a rather pointed picture because there it is 12 years ago and the whole story is there. We just weren't smart enough at the time to realize what was happening.

So, that's all I had to say. I'd be happy to answer any questions you might have.

Senator FORD. Thank you, doctor. You did very well.

[The statement follows:]

STATEMENT OF JOHN MCCARTHY, PH.D., NATIONAL CENTER FOR ATMOSPHERIC RESEARCH

My name is John McCarthy. I am the manager of the Research Applications Program at the National Center for Atmospheric Research, called NCAR, located in Boulder, Colorado. As part of that position, I direct low-altitude wind shear research, and have approximately thirty employees engaged principally in that activity.

It is a pleasure to provide this Committee with an update on low-altitude wind shear activities that are pertinent to the mitigation of this most severe aviation hazard. As you know, I have been deeply involved with identification of the scientific nature of the hazard, particularly the convective microburst form of wind shear, for approximately ten years. Since 1982, I have directed considerable research for the Federal Aviation Administration, emphasizing not only the characterization of the hazard, but have, in addition, addressed detection and warning and pilot training issues. Much of my field investigation work has been concentrated at Denver Stapleton International Airport.

The Chairman of the National Transportation Safety Board has recently been quoted as saying that wind shear is the single most hazardous weather situation responsible for causing the greatest loss of air carrier passenger lives in the United States. Fortunately, in my opinion, the FAA, in conjunction with other federal agencies, the private sector, and academic institutions, has developed a rather complete plan to mitigate the wind shear threat. Several key elements are far along toward completion at this time.

Recently, the Boeing Commercial Airplane Company, representing a consortium of the aviation industry, including myself as the aviation meteorologist, completed a fifteen-month contract to provide the FAA with a completely detailed wind shear training syllabus. This WINDSHEAR TRAINING AID is currently in the process of being distributed to all U.S. air carrier operators. The basic direction of the program is to instill in pilots the critical need to avoid wind shear, to provide a model of flight crew actions that demonstrates a routine strategy for avoidance, and also to provide a wind shear recovery procedure that can be used successfully by pilots to exit inadvertent wind shear encounters.

Unfortunately, there are many wind shears that are sufficiently severe that no known recovery technique will allow for a successful penetration. The FAA has a very aggressive effort to develop and field detection and warning systems that are intended to identify and warn pilots and controllers of severe wind shear, prior to pilots' possible entry into hazardous conditions.

The only currently operating wind shear detection system is the Low-Level Wind Shear Alert System, or LLWAS. The current system has been found to be deficient in the detection of microbursts, and a determined effort is underway at the FAA, with NCAR assistance, to replace the older system with one that provides a substantially greater chance of detecting microbursts, has fewer false alarms, and which provides a considerably more pilot user-friendly wind shear alert message. The improved LLWAS has undergone limited testing at New Orleans and Denver, and plans currently call for a full operational demonstration at Denver during the summer of 1987.

The Committee should keep in mind, however, that even the improved LLWAS has significant limitations that indicate that a full reliance on this system to protect airports should not be made. For example, the system cannot detect descending microbursts that have not yet reached the earth's surface.

To address this and other deficiencies, the FAA is undertaking the Terminal Doppler Weather Radar Program, called TDWR. In partnership principally with MIT Lincoln Laboratory and NCAR, the FAA is testing the use of Doppler weather radar to detect automatically the presence of severe wind shear in the vicinity of airports. Testing has taken place at Denver, Memphis, and Huntsville, and will continue at Denver during the summers of 1987 and 1988. The advantage of TDWR is that it will provide a much higher resolution coverage than LLWAS and consequently is expected to provide more accurate identification of severe wind shear conditions. In addition, it is expected to provide an early indication that a microburst is in the developmental stages above the airport environment, allowing for an advanced warning of the event prior to actual impact on the airport area.

The TDWR effort is a forerunner to two principal procurements within the FAA. The first one is directed toward installation of NEXRAD Doppler radars, modified for terminal use as interim TDWR radars, at seventeen terminal areas, beginning in 1990. Following completion, the FAA has plans to procure a larger number of terminal Doppler weather radars for many of the terminals in the United States that are subject to wind shear.

To reiterate, the principal objective of the TDWR experiment at Denver is to formally test the ability of a Doppler radar-based automatic system to detect and warn pilots and controllers, with a high degree of precision, of the presenced of severe wind shear conditions. I am optimistic that these tests in 1987, an an operational demonstration planned for 1988, will be most successful, leading to full delivery of the interim NEXRAD TDWR system beginning in 1990.

There are two additional components of the FAA wind shear plan that I will touch upon briefly. With substantial FAA funding, NASA will be developing the technology of an airborne, forward-looking, remote sensing system that is designed to identify severe wind shear ahead of an aircraft, and with a sufficient time in advance of penetration, to make an appropriate avoidance maneuver. The anticipated conclusion of this initial development phase will be within five years.

The FAA is also supporting the further use and development of airborne detection and guidance systems that (1) identify when an aircraft has actually entered wind shear conditions, and (2) provide flight director guidance to the pilot to assist a wind shear recovery maneuver. A number of such systems are currently in operation or in development.

Mr. Chairman, I hope that my testimony provides you with a brief summary of my perspective on how the wind shear effort is going. I want to be clear: we still have a severe wind shear problem in U.S. and world aviation, because much of the technology mentioned here is yet to be transferred into actual operations. However, I am optimistic that the job will be completed, with the continued support of the Congress and the administration.

Finally, I want to stress that there is no single solution to the wind shear problem. We must resist the temptation to believe that any one of the "fixes" mentioned here can fully solve the problem. Only by addressing a complete perimeter to the problem, as outlined here, can wind shear accidents change from an event that occurs every eighteen months, to one that occurs every twenty to thirty years.

I will complete my testimony by showing a few slides which will clarify some of the points in my testimony. Thank you for your time, and I will be happy to answer any questions that you might have.

Senator FORD. Mr. Schwind, do you want to proceed.

STATEMENT OF JOSEPH M. SCHWIND, DEPUTY DIRECTOR OF ENGINEERING, AIR LINE PILOTS ASSOCIATION

Mr. SCHWIND. Thank you, Mr. Chairman, Senator. ALPA appreciates this opportunity to appear before you today to add the collective voice of our membership to those in the Congress, the administration, and the aviation community at large in discussing critical aviation issues such as wind shear and the reauthorization of the Airport and Airway Trust Fund.

I would like to summarize our larger statement and request that it be made a part of the official record.

Senator FORD. It will be included in the record.

Mr. SCHWIND. At the outset I want to especially commend you, Mr. Chairman, for your leadership in Congress on aviation issues, and particularly for your early attention on reauthorization of the Trust Fund. Your prompt scheduling of these hearings is clear evidence that you and your subcommittee place the highest priority on this critical aviation program.

The main objective of the reauthorization legislation must be to improve the safety of the nation's airports and air traffic services. Of course, there are other important priorities, such as insuring future operating capability and supporting the national plan of integrated airport systems, NPIAS as it is called, for reliever airports.

First and foremost, however, must be the safety priorities. The Airline Pilots Association positions are determined by this basic concept. The essential safety priorities need to be recognized in the renewal legislation. First as pilots we are greatly as concerned with safety hazards such as severe weather and in particular wind shear because we are confronted with its direct effects in the performance of our duties.

Although we take professional pride in our training, in our ability to master the many types of difficult situations that might confront us, our professionalism demands a healthy respect for the dangers that severe weather holds for the aircraft we fly and the passengers we carry.

Toward that goal we are hopeful that the next generation radar system, the NEXRAD which is currently undergoing evaluation will provide both pilots and controllers with the information necessary to prevent an aircraft from encountering severe weather.

Even though this program is approximately one year behind schedule we are hopeful that a contract award will take place by the fall of this year. We are deeply concerned, however, that the specifications for the Terminal Doppler Weather Radar System have not yet been developed by the FAA and provided to the industry for comment.

Considering the work that has already gone into the NEXRAD program and Doppler technique, we find it difficult to understand why these specifications have not yet been finalized. This is further evidence that the FAA needs to assign priorities and must recognize that safety-related programs have to come first.

Since it is obvious that most airport terminal areas will not have adequate weather radar in the next five years we recommend that Congress instruct the FAA to evaluate the currently available Doppler Weather Radar being produced for TV broadcast stations as an interim system until the more advanced Terminal Doppler Weather Radar System is available. That's the system that Dr. McCarthy was referring to.

There is a tendency at the FAA to view these suggestions to evaluate an alternative or interim system as derailing or sidetracking FAA's ultimate goal. This is not true. We are simply saying that once the FAA has a plan it should not put on blinders during the many years that the plan is being completed.

Another area where your subcommittee can play a critical role in reducing the number of weather-related aviation accidents is in the area of communicating the weather information to the pilot. In almost every incident involving wind shear or severe weather it was learned during the accident investigation that some weather observer in the area knew of the developing danger, but there wasn't a procedure to pass that information on to the flight crew in a timely manner. And I emphasize "timely."

I'm sure you will agree that the most advanced weather detection equipment is useless if the information is not made available to the flight crew on final approach or about to take off.

In 1975 the NTSB issued a recommendation to the FAA, "Develop and institute procedures whereby approach controllers, tower controllers, and pilots are provided timely information regarding the existence of thunderstorm activity near to departure or approach flight paths."

In 1984 the NTSB Chairman Jim Barnett, was testifying before Congress, said, "We must improve communications between the weather service, air traffic controllers, and pilots, to assure that pilots are provided the most current forecast and existing conditions." Therefore, Congress should require the Department of Commerce, which is the National Weather Service, and FAA to cooperate to establish hot lines between the National Weather Service and controllers, and that an ATC, an Air Traffic Control supervisor be responsible to immediately pass the hot line information on to the flight crews.

In addition to a dynamic terminal Doppler weather program, we believe it is essential that concurrent funding be made available for an equally aggressive research, development, and evaluation of an airborne sensor capable of reliably detecting the various forms of wind shear and other severe weather immediately ahead of an aircraft. This would provide pilots with the state-of-the-art weather detection wherever they fly, it wouldn't matter if they were in this country, out of this country, or at remote sites which quite often happens on charter flying, and so forth, this would not limit the application of such technologies to a select number of airports within our national airspace system, and would provide the aviation public with the maximum degree of protection from future tragedies such as Delta 191 in Dallas.

Many promising studies are currently under way on airborne sensors, such as infrared sensors, laser-Doppler techniques, and airborne Dopplers. Since many wind shear encounters are accompanied by a very heavy rain, which is thought to have a debilitating effect on wing lift and, therefore, aircraft performance, we recommend that the FAA also examine the impact that heavy rain has on aircraft performance.

In summary, Mr. Chairman, we have pointed out several areas where we feel that special consideration should be given so that the national airspace system can operate as safely and efficiently as possible. We believe that we currently have the best and safest air transportation system in the world.

We strongly urge Congress to provide the funds to make that system even better. The Air Line Pilots Association is proud to be part of that effort.

Thank you for this opportunity to present our priorities for aviation safety. I will be pleased to answer any of your questions.

Senator Ford. Thank you, Mr. Schwind.

[The statement follows:]

STATEMENT OF JOSEPH M. SCHWIND, DEPUTY DIRECTOR, ENGINEERING AND AIR SAFETY, AIR LINE PILOTS ASSOCIATION

Mr. Chairman and members of the subcommittee, I am Joseph M. Schwind, Deputy Director—Engineering and Air Safety Department of the Air Line Pilots Association. ALPA represents 39,000 professional pilots who fly for 48 commercial airlines. ALPA appreciates the opportunity to appear before you today to add the voice of our membership to those of other members of the aviation community in discussing topics critical to aviation, such as wind shear and the pressing need for the reauthorization of the Airport and Airway Trust Fund.

We all agree that continued improvement in aviation is essential to sustain the operational capability of our air transportation system, provide the improvements necessary to meet additional airport capacity requirements, and provide necessary safety improvements to the nation's air transportation system.

For a number of reasons, in recent years the FAA has not been provided with sufficient resources necessary to carry out its basic safety mandate. The inadequate funding has forced it to establish program priorities that we believe have not in all cases been in the best public interest from a safety standpoint. We therefore welcome the opportunity to present our comments on those programs which we feel are in need of continued congressional support.

The majority of today's safety or modernization programs will extend over a period of five or ten years or even longer. This is due to the revolution in technology which has produced a complex and extremely sophisticated number of systems to contend with in any large development program. In most cases, a program of five years' duration is a short-term program. In order to be successful, the FAA must have a sound funding base to provide the necessary resources (personnel, facilities, and equipment) to complete a program on time. Time is important since we are dealing with safety. Time is also important because, in most cases, costs increase with time delays.

To remedy this situation we propose that the trust fund be removed from the unified federal budget as a means of ensuring that the user tax revenues are used as they were intended. We also propose the use of trigger mechanisms as a means of increasing or decreasing the tax rate as a function of the trust fund balance. Further, we have proposed that the percentage of FAA operations and maintenance funding coming out of the trust fund be gradually increased to one hundred percent over the next five years if our first two proposals are acted on in a positive manner.

The following is a list of programs, projects, or activities which need either funding, direction, legislation, or some combination thereof. Since these programs are all safety related, they should be given special consideration.

1. NEXT GENERATION RADAR (NEXRAD) AND THE TERMINAL DOPPLER WEATHER RADAR SYSTEM

As pilots, we are greatly concerned with severe weather and, in particular, wind shear because we are confronted with its direct effects in the performance of our duties. Although we take professional pride in our training and our ability to master the many types of difficult situations that might confront us, our professionalism demands a healthy respect for the dangers that severe weather holds for the aircraft we fly and the passengers we carry. We are hopeful that the NEXRAD system currently undergoing evaluation will provide both pilots and controllers with the information necessary to prevent an aircraft from encountering severe weather. We are encouraged by the progress of the NEXRAD program and are hopeful that a contract award will take place by fall of this year.

Yet with all its promise, NEXRAD fulfills only part of the urgent needs of the aviation user. It will certainly be able to generate excellent weather information for enroute planning, but if we hope to use this technology to detect wind shears and microbursts, it must also be able to perform in a terminal airport environment where these phenomena are the most dangerous to aircraft. Because of such issues as siting, resolution, and processing time, the only practical application of this technology for this purpose is the Terminal Doppler Weather Radar System. We strongly support such a system as a necessary adjunct to the NEXRAD program. We are deeply concerned, however, that the specifications for the Terminal Doppler Weather Radar System have not yet been developed by the FAA and provided to industry for comment. Considering the work that has already gone into the NEXRAD program and Doppler technique, we find it difficult to understand why these specifications have not yet been finalized. This is further evidence that the FAA needs to assign priorities and must recognize that safety-related programs have to come first!

In addition to a dynamic terminal Doppler weather program, we believe it is essential that concurrent funding be made available for an equally aggressive research, development, and evaluation of an airborne sensor capable of reliably detecting the various forms of wind shear and other severe weather immediately ahead of an aircraft. This would provide pilots with state-of-the-art weather detection wherever they fly, would not limit the application of such technologies to a select number of airports within our national airspace system, and would provide the aviation public with the maximum degree of protection from future tragedies such as Delta 191 in Dallas. Many promising studies are currently under way on airborne sensors such as infrared sensors, laser-Doppler techniques, and airborne Dopplers.

Since many wind shear encounters are accompanied by very heavy rain, which is thought to have a debilitating effect on wing lift and, therefore, aircraft performance, we recommend that the FAA also examine the impact that heavy rain has on aircraft performance.

2. HUMAN PERFORMANCE RESEARCH

In order to help ensure safety in our nation's aviation system, it is important to understand areas where human shortcomings may lead to problems, incidents, or accidents. The FAA is attempting to address these issues through selection, hiring, and operational practices for its employees. Pilots are the other half of the important safety equation.

The FAA published a Cockpit Human Factors Research Plan in January 1985 that is designed to investigate and improve the human interface with an automated air traffic control system and highly automated new aircraft. The FAA has begun to address several operational safety issues identified by this plan, and more will be studied at a later date. Rather than curtail these important human interaction safety studies, we feel the FAA should proceed with its plan with increased vigor and commitment. The original funding levels for this important research program were expected to be $1.65 million in fiscal year 1985, $4.3 million in fiscal year 1986, and $3.4 million in fiscal year 1987. Funding levels to date have been a small fraction of these original projections. It is a program long overdue, and we urge you, Mr. Chairman and member of your subcommittee, to allocate adequate funds and personnel so that the FAA can properly address these safety issues. The findings of these safety studies will yield important immediate operational safety gains and continue to pay safety dividends in the future.

3. RUNWAY FRICTION MEASUREMENT

At the present time a pilot landing or taking off on a runway contaminated with snow, ice, or slush must rely primarily on other pilot reports as to the condition of that runway and the ability to stop on that runway. These pilot braking action reports are very subjective because the reporting aircraft could be a different model—lighter/heavier, faster/slower, etc. There have been many instances in which aircraft went off runways because the flight crew had inadequate information on the stopping condition of the runway. Therefore, there is a need to determine if the presently available friction measurement vehicles are sufficiently accurate under winter contaminated conditions to be used to give runway friction measurement information to a flight crew. These vehicles have proven themselves to be very useful to the FAA and an airport operator in ensuring that the runway is maintained to a satisfactory dry/wet level of friction. We must now expand this knowledge to determine the vehicles' reliability under winter conditions. Such a research and development program is approximately 50 percent complete. Since this program involves both ground vehicles and large transport aircraft (B-727 and B-737), Congress should either earmark or recommend $500,000 to be spent each year, for the next four years, in order to complete this project.

4. FAA SECURITY PROGRAM

Although airports already have elaborate systems for searching passengers and luggage to minimize the chances of a hijacking, hijacking incidents still occur and terrorism is continuing to spread worldwide. Recent terrorist activities have emphasized that our security systems are still vulnerable.

To counter this threat, we must continue the FAA security program and make improvements. As the terrorists increase their knowledge, techniques, and sophistication, we need to update and improve our security efforts. Since terrorists continue to modify both the packaging and types of weapons and explosives they use, there is a continuing need to develop new technology that will detect these threat sources.

Furthermore, there is a need to increase the number of security inspectors and to purchase additional and more sophisticated detection systems as they become available. It is estimated that at least $10 million is necessary for this addition.

5. TRANSITION TO THE MICROWAVE LANDING SYSTEM (MLS)

ALPA supports the MLS program because precision approach procedures are inherently safer than nonprecision approaches. We also support prompt installations of ILS systems where they can be installed. Our position has long been that there should be a precision approach to every runway used by air carrier aircraft. We are concerned that many runways identified for a precision system will have to wait several years for an MLS.

The flexibility of the MLS, especially regarding siting and installation costs, makes it possible to have a precision approach to runways where an ILS is not feasible. Also, the FAA has revised its Airway Planning Standard Number One to include MLS qualifying criteria that will permit MLS selection for runways that could not have qualified using the present ILS criteria.

Because of its direct relation to safety, the ILS and MLS programs should not be subjected to any budget reduction that would delay the availability and installation of precision approach guidance for additional runways.

The success of the MLS implementation plan depends greatly on the will of the users to purchase MLS receivers. Implementation will be seriously handicapped if the FAA proceeds with its plan to collocate the MLS with ILS systems. Congress should direct the FAA to ensure that, in the near term, MLS systems be installed primarily on runways that will increase airport capacity or on runways that do not now have a precision approach system.

Additional research and development is required for the MLS program. The FAA has yet to determine how and when the MLS receiver will transition from the front azimuth signal to the back azimuth signal during missed approach procedures and how the appropriate (back or front) azimuth will be selected for departures.

Also, cockpit displays for complex MLS/RNAV segmented and curved approaches have yet to be developed, and the necessary displays for pilot situation awareness have not as yet been identified. In addition, there is a need to research and test the multiple MLS antenna locations that will be needed for large aircraft.

In the areas of MLS and MLS/RNAV instrument approach procedures development, a substantial amount of research and testing still must be done to develop the required obstacle clearance areas for the various segments and maneuvers.

6. AIRPORT SURFACE DETECTION RADAR (ASDE)

The problem of "close encounters of the wrong kind" on airport surfaces is one growing in magnitude. One need only examine the accident and incident reports for the past ten years to see the continuous increase in events involving either two aircraft or an aircraft and vehicle.

The worst collision in aviation history occurred on the ground between two B-747 air carriers at Tenerife. The increasing number of unauthorized runway incursions should be a signal that this matter needs attention before even more disasters occur. Currently the only tool air traffic controllers have available at a limited number of airports to deal with this problem is an antiquated, unreliable radar system that, from what we have been told, is virtually worthless. The FAA has, for the last decade at least, been in the process of developing and procuring a new-generation surface detection radar (ASDE III) that would provide controllers the display they need to ensure adequate separation between aircraft during periods of poor visibility. Needless to say, this has not been one of the better managed FAA programs!

We understand that a contract has finally been awarded to procure approximately 30 of these new systems to replace the current ones and for installation at new sites. We welcome this action and hope they will be installed and operational so as to keep pace with the tremendous growth of traffic activity at our major airports. But perhaps we should not stop with the procurement of these units. The American taxpayer has expended an enormous amount of money for the Department of Defense to develop sensors that can see in the dark or through obscurations to vision. Can this technology be adapted for use on airport surfaces so that controllers can see through bad weather and darkness? The safety implications would be interesting to explore, and we feel sure there are American manufacturers out there who would be delighted to provide both the FAA and members of your subcommittee information on their equipment capabilities. We believe this is a concept that the

FAA should actively pursue through an active R,E&D program. We would also hope your subcommittee would find it equally interesting.

7. AIRCRAFT CERTIFICATION STANDARDS FOR NEW TECHNOLOGY AIRCRAFT

Present regulations dealing with the certification of air carrier aircraft do not address some of the systems and concepts being proposed for the next generation of aircraft. Systems such as fly-by-wire, fly-by-light, active controls, reduced static stability, side-stick control, and associated new cockpit instrumentation, where the aircraft to a greater or lesser extent is being controlled by computers, have appeared only on certain military aircraft where mission requirements dictated such systems. In many cases these automatic systems are still in the military research and development area. However, several manufacturers are proposing that these exotic systems be standard on air carrier aircraft scheduled to be flown and certificated within the next two to three years. It is already known that these sophisticated systems are more susceptible to electromagnetic interference (EMI) and lightning strikes than conventional control systems. What isn't known is how to protect these computer-controlled systems from total failure following a lightning strike or interference by some other high energy source. At the present time, the expertise in these fields is at the industry level, not at the regulatory level. Therefore, the FAA is dependent upon the system manufacturer for certification guidance, which is a very questionable role reversal.

Therefore, if the FAA and the certification regulations addressing such systems are to keep pace with these advancements, it is imperative that funding be approved to allow FAA personnel to investigate these systems and concepts.

8. CABIN SAFETY

The topic of air carrier cabin safety encompasses a very large range of items and includes carry-on baggage, interior crashworthiness, and interior fire resistance. We recognize and congratulate both the FAA and industry for the amount of R,E&D already completed in this area. However, to a great extent, this R,E&D has only proven how little we now know about cabin interior smoke, fire, and toxicity, and indicates an obvious need to continue testing. Furthermore, as aircraft manufacturers and airlines continue to add fuel tanks in previously sterile areas such as cargo compartments and tail planes, we must guarantee that this additional fuel will not turn the passenger cabin into an inferno. Research into anti-misting fuel must therefore continue into fuel tank design, such as self-sealing tanks and breakaway self-sealing fittings. All of these items affect passenger safety and the ability to survive an inflight fire or accident. Improvements in cabin safety, however, have been slow in coming and require additional attention from Congress to ensure the necessary improvements.

9. COCKPIT DISPLAY OF TRAFFIC INFORMATION

The Air Line Pilots Association is concerned about the potential role of a cockpit display of traffic information in an airborne situation display (ASD) in the new ATC system. We feel the merits of such a system have been obscured because of exaggerated claims made both by some of its proponents and by those with interests in competing alternatives. These conflicting claims have prevented a positive approach toward developing the concept into a working reality. The original National Airspace System Plan (NASP) at least briefly addressed the possible merits of an ASD, but the current version does not contain any reference to such a system at all.

The tests of the ASD to date by the FAA and NASA have shown to everyone's satisfaction that substantial capacity gains may be achieved through pilot-controlled spacing on in-trail arrivals and departures using common paths. We recommend that the ASD be reinstated as an active R,E&D program.

10. AIRPORT RESEARCH AND DEVELOPMENT NEEDS

We urge this subcommittee and Congress to give immediate attention to the R,E&D funding needs for airport capacity enhancement. The report of the Industry Task Force on Airport Capacity Improvement and Delay Reduction identifies many R,E&D projects which are essential for short- and long-term capacity improvements. It is critically important that funding be provided for those projects in order to ensure that airport capacity keeps pace with airspace capacity.

The prevention of runway incursions requires additional research and development. Both NASA and the NTSB have identified the need for improved visual aids such as signs and taxiway lighting systems to help prevent runway incursions and allow safe operations in low-visibility conditions. Visual glidepath guidance is also an essential ingredient for safe operations during construction projects involving threshold displacement. There is currently no means to provide such guidance information. A means needs to be developed for effective temporary visual and electronic vertical guidance systems. Additionally, there is a need to develop effective lighting and marking of airport surfaces specifically for use during construction projects. Many airports contain runway safety areas that do not meet current adequate safety standards. These need to be improved.

In addition, there is a need for an overall integrated system that will prevent runway incursions by aircraft and ground vehicles on an airport. The Surface Movement Guidance and Control System (SMGCS) has been introduced as a possible solution to the problem of incursions; however, additional research and development is needed before this or any similar system can become operational.

11. TRAFFIC ALERT AND COLLISION AVOIDANCE SYSTEM (TCAS)

As you are aware, Mr. Chairman, the FAA and the aviation industry over the last six years have been in the process of developing an independent airborne collision avoidance system. This system, called TCAS, has several versions, one of which (TCAS II) is now actively flying in line operations in a Piedmont B-727 aircraft. This is a milestone, and we applaud the accomplishments of the people involved in bringing this system to fruition.

We cannot, however, endorse TCAS II as an end product. In our opinion, the TCAS II operational deficiencies of excessive false alarms and vertical-only escape maneuvers eliminate it as a candidate for the air carrier collision avoidance standard. I am sure, Mr. Chairman, you are aware that the FAA and industry have also been working on the development of a TCAS III. As a matter of fact, this system, which is installed on FAA Technical Center aircraft, has undergone a significant number of hours of flight testing with excellent results. While its full development and certification may be behind that of the TCAS II, we are confident that if the FAA affords the proper priority and leadership, the TCAS III could be ready for operational testing before the end of 1988. The only problem we envision in this process is the FAA's reluctance to ask for the funding necessary to complete an operational evaluation program similar to that being conducted for TCAS II. Without such a program, certification of the TCAS III will unnecessarily drag on, fulfilling the pessimistic predictions of those who are satisfied with TCAS II and willing to provide the traveling public with a second-rate collision avoidance system.

We strongly urge Congress to provide the funding necessary to complete the certification of the TCAS III system and direct the FAA to use it for that purpose.

I would like to share with you the line pilot's view on the operation of the national airspace system and its apparent direction. In a safety survey of line pilots conducted by ALPA last year, the greatest single concern expressed was of a mid-air collision. The second most important concern was of airport congestion and system overload.

Pilots know that the present ATC system and acceptance rate of our major airports cannot accommodate the ongoing growth of traffic. At times it even appears that the potential for a system breakdown exists. To its credit, however, the FAA has prevented this through the application of flow control procedures and airport quotas, which we support and believe must be maintained until the controller work force is strengthened and critical NASP elements are in place.

In an attempt to compensate for the inability of our current system to accommodate user demands, the FAA is continually exploring ways to increase system capacity. Unfortunately these means frequently include the reduction of various separation standards and the introduction and proliferation of unorthodox procedures. We feel strongly that such procedures reduce the margin of safety and actually contribute to near mid-air collisions and runway incursions—a high price to pay for a minor increase in system capacity.

Frequently we pilots are accused of being either negative or too conservative in our reaction to such proposals, but I would like to remind the subcommittee that federal law places the final responsibility for the safe operation of an air carrier aircraft directly on the shoulders of the captain. Pilots accept this, but we are also aware that following an incident or accident involving any of these procedures and the many variables such as weather, runway contamination, or mechanical problems, no one will step forward and offer to share that responsibility. Therefore, we will continue to act both cautiously and responsibly in accepting any new procedure we believe could compromise the safety of the traveling public.

Some organizations have proposed to defederalize certain airports, remove prohibitions on local taxation, and provide block grants for state distribution. Such actions must be carefully scrutinized for their effects on the total air transportation system. Other proposals would increase terminal and landslide spending without regard to the equal need for airside improvements. We must beware of one-sided proposals.

Concerning the issue of noise, much more attention must be placed on eliminating operational restrictions and applying noise reduction through technology.

The current Airport and Airway Trust Fund Act went a long way toward improving our airports and air traffic service. At the same time, however, deregulation has created new challenges, and technology allows greatly improved operational capabilities. Unfortunately, today's airplane exceeds the capability of the airport ground support system and the air traffic control system. An FAA short of experienced air traffic controllers and inspectors needs greater funding for operations. Research and development must continue to keep the technological edge in the air traffic control and civil aviation security areas. We believe an independent FAA, unfettered by multiple bureaucratic layers, would be more effective in dealing with the deregulated environment.

In summary, Mr. Chairman, we have pointed out several areas where we feel that specific consideration should be given so that the national airspace system can be operated as safely and efficiently as possible. We believe that we currently have the best and safest air transportation system in the world. We strongly urge Congress to provide the funds to make that system even better. The Air Line Pilots Association is proud to be part of that effort.

Senator FORD. I have a couple of questions for both of you, and if you think of something you want to elaborate on it'll be fine.

But, doctor, in your testing of the Terminal Doppler Weather Radar what were the major problems you encountered?

Mr. MCCARTHY. Well, in the testing that went on prior to this time all of the testing involved human forecasters providing the product. So, it was a human-based system even though the technology was not.

Additional problems that were encountered in testing in 1984 at Denver was a high degree of ground clutter, which had a tendency to contaminate the signal. But in spite of that we were able to detect, we believe, all of the microbursts that occurred over the airport.

Those two problems represent the two areas that are being addressed primarily by MIT Lincoln Laboratory, in conjunction with NCAR. First, we will use ground clutter suppression techniques at Denver that have been demonstrated effectively both at Memphis and Huntsville which we think will eliminate the ground clutter problem.

The elimination of the human forecaster is a requirement in the long-term health of the program. A great deal of success was obtained last summer at Huntsville to automatically detect microbursts. The testing coming up now will fine tune that automatic detection, which we consider to be a requirement before that system is basically let go in either its terminal NEXRAD form, or the subsequent full TDWR procurement which is to follow.

So, the ground clutter problem has been fully addressed. The second problem—the automation of the detection system—is in its final testing, and we are very optimistic.

Senator FORD. When do you believe that the terminal Doppler radar will be ready for installation? And in addition to that, how many airports do you think should have the Doppler System.

Mr. MCCARTHY. There are two stages to the FAA's plan. One is, I believe, essentially funded.

Senator Ford. I thought I asked you what your opinion was.

Mr. McCarthy. Okay. My opinion is that the first Doppler radars will be installed beginning in early 1990, and approximately 17 of them will go to the major hub airports.

The follow-on procurement for what I would think should be about 100 radars cannot occur any time prior to about 1992 or 1993, because it takes such a long time to go through the whole government procurement process.

I'm not a procurement specialist. I'm a scientist. And I don't know all of the issues that get in the way, but it takes a very long time. And the NEXRAD Program is an example of a government procurement that's taken a long time. The technology has been around a long time; it's a very slow, laborous process.

I will make a comment with regard to Mr. Schwind's comment about off-the-shelf TV technology, so to speak. I do not believe that those radars can deal with the wind shear problem. One of my colleagues at NCAR was involved in a government blue-ribbon panel to look and see if off-the-shelf technology could address a NEXRAD detection requirements, one of which is wind shear, and the answer is it cannot.

I have been saying for years now how important it is to get Doppler radar technology out there, but not until it's ready. And the existing technology that's available commercially just doesn't have the capability.

I can't recall if there was another question or not.

Senator Ford. I think that covered it very well.

Mr. Schwind, you expressed your concern on the need for public comment on specifications of the terminal Doppler system. Are you aware of any specific problems with the development of this system?

Mr. Schwind. Yes, there are problems with it. In fact, the initial terminal Doppler weather radar that's going to into the terminal areas is really not even slated for the terminals. It's the NEXRAD that the FAA has made a decision, and we're not faulting the decision, to take the NEXRAD which is really a large area weather radar and it doesn't have the update that's required in the DFAA plans to use for true terminal Doppler radar. The NEXRAD that's going to be put in that Dr. McCarthy referred to at the I think it's 18 key terminal areas really wasn't designed for the purpose that it's going to be used in.

And all we are saying is, number one, that the FAA has been lagging in really coming out with specifications on a true terminal Doppler weather radar system. Number one that's what we're saying.

We're saying in the interim why not look at the off-the-shelf Doppler radar that is available right now. It was originally an airborne system; it has been modified slightly to make it a ground system and it does show some promise. We're only saying it's an interim. We're not saying it will detect wind shear, but it will do a good job of detecting overall weather.

And, furthermore, it is available right now until the true terminal Doppler weather radar comes out and that will be some time in the future.

Furthermore, all we are saying also is that the FAA should not put on the blinders. It should look at these systems and see if they do have merit.

Senator **Ford**. Well, I find that things are moving so fast in the communications area, about the time you make a decision and install one system it's obsolete.

Mr. **Schwind**. That's true.

Senator **Ford**. And so you have to make a decision at some point. If you keep waiting and waiting there'll be something new or you've got something you're proposing that will make it a greater system or better system. I know if you're going to buy a computer, you buy a computer today and tomorrow you've got a great big monster there in front of you. The next thing you know they have a lap computer.

So, it just changes, and you have to make a decision to go on. I know a fellow who was trading his computer in and wanted to get a better one, more sophisticated, do more things. He said, "How much am I allowed for this in trade-in?" And the salesman asked him if he had a boat. And the man said "Yes." He said, "Well, use it as an anchor." They're moving so fast and so sophisticated that it's hard to keep up with them.

Let me ask both of you, I guess, do you believe that FAA has moved as quickly as possible in the development of the terminal Doppler weather radar; have they moved as fast as they could on that, as well as with respect to the airborne Doppler radar problems?

Mr. **Schwind**. Okay. First, as Dr. McCarthy has said, this knowledge has been available for quite some time and we do not feel, the Air Line Pilots Association does not feel that the FAA has moved as rapidly as it could in light of the fact that the technology has already been known. It's simply a matter of priorities, and we do not feel that the FAA has put the priority in that area as greatly as it could and should have.

Senator **Ford**. Well, is it money that's holding them back?

Mr. **Schwind**. I would say that money is a major factor because they quite often have not requested all of the money that in a lot of cases that even Congress has authorized them to use. So I would say money is number one. And commitment number two.

Senator **Ford**. Well, doctor, if we spend more money will these radar systems be available sooner than now anticipated?

Mr. **McCarthy**. I think in terms of the NEXRAD system, which Mr. Schwind mentions, it's being somewhat delayed.

I have very little patience with a delay. I feel as a scientist that the technology is here, let's get on with it and put it out there. I can't say why it's being delayed. It need not, in my opinion, and we need to get on with it. And it does need to have a higher priority.

I think in terms of money for the overall system to cover the proper number of airports, I think that it's not the FAA but OMB or some other level of the administration.

Senator **Ford**. You just hit a nerve, OMB.

Mr. **McCarthy**. Okay. My sense is that the resources on covering the number of airports that need to be covered just aren't being placed there, and I think it's an unacceptable situation that Congress needs to get at very seriously. That's where I think there's a big problem.

Senator FORD. It's pretty tough when you sit there as a Senator and hear the administration tell you that we don't care if you go ahead and authorize and appropriate ex number of dollars, we're not going to spend it. It's frustrating to me when you see the need and you're able to provide funding and then it isn't spent.

Mr. MCCARTHY. Again, I'm a pilot and I'm a scientist and it's been a long, very frustrating experience because the technology is here so let's get on with it.

To be honest with you, I think it could be a higher priority in the FAA, but I think there's an awful lot of activity going on in the FAA. I think there's hindrance elsewhere in the administration.

Senator FORD. Well, my information is that the schedule for the installation of the modified NEXRAD systems at the high-density terminals will be 1990 through 1992. The first 17 will be subject to a production contract that will be awarded in July this year. So you can see all the problems that might develop in trying to develop that contract.

Senator Wirth.

Senator WIRTH. Dr. McCarthy, didn't you give very similar testimony on the need and the availability, the technology, and so on, a year ago when we had a hearing out here at Stapleton?

Mr. MCCARTHY. Yes, a year ago.

Senator WIRTH. And we knew a year ago what we know today.

Mr. MCCARTHY. I gave testimony two years ago saying the same thing.

Senator WIRTH. Well, I was going to get back to that. It seems to me you said the same thing two years ago, and we have not seen the FAA move on that in two years. The technology has been in place, we knew then what was needed. The technological world has said it's available. The air line pilots have come in and said over and over and over again "let's do it." And it's been the delinquency of the FAA, hasn't it?

Mr. MCCARTHY. Well, actually, the FAA is moving on it. And NCAR and MIT have received very large amounts of funding in the last few months to get these testing and operational demonstrations into the field.

So, I can't say that they haven't moved. Obviously, they are moving very strongly. The problem to me is not so much the up front R&D finishing work, because that's well in hand, it really is. What I'm much more concerned about is the fielding of the systems into the operations and that's where I think it's hurting.

Senator WIRTH. Well, it sounds to me like we've just got to tell the FAA go do it, rather than—I think we're down to it at this point.

Senator FORD. Well, I've tried that before.

Yes, Mr. Schwind.

Mr. SCHWIND. Before we close, two things that we would like to get across to you is, the Air Line Pilots Association, that is the emphasis on communications that I hit in my verbal testimony, that you as Congress could require the FAA to put in place the recommendations of the National Transportation Safety Board relative to communications.

The most magic of black boxes is useless if the information is not sent in a timely manner to the flights crews. And, as I stated, after every accident it's always been shown that the information was available but someone was sitting on it, in essence, and putting it through the regular keyboard, and going from there to Kansas City to the National Severe Weather Center, and then on out to the pilots.

Let me just finish it. That's number one. If you could somehow emphasize to the FAA the need for communications.

And, number two, the specifications and the advancement on airborne detectors; airborne detectors are really going to be the main thrust of our improvement in the years to come, because we will not have all of these systems that we're talking about, the groundbase systems, at all of the airports. It's just not possible.

So, those two items, if you would put emphasis on we would appreciate it.

Senator **Ford**. Thank you, Mr. Schwind.

Doctor.

Mr. **McCarthy**. I'd like to comment. On the second point I couldn't agree more, that we have to do the work on airborne systems. Work is going on. There are some very major technical problems in demonstrating that it works.

I couldn't agree more with some aspects of the first point; getting the information out in a timely manner is absolutely critical. The same goes for pilots issuing pilot reports. So, it's not just weather observers. One of the best of weather observers is two eyeballs in the cockpit, or four eyeballs in the cockpit, and we've got to get that out, too. You can't say it's all just one side of it. We all have to play a part in that.

Senator **Ford**. It gets back to the human factors sometimes, doesn't it, doctor, as you said earlier.

Mr. **McCarthy**. Yes, sir.

Senator **Ford**. Well, gentlemen, we do thank you. This completes our hearing, and we head back for Washington to try to put together a piece of legislation that will be helpful and useful, so that those who use the airlines will feel safe and will continue to use them.

Senator **Wirth**. Thank you, Mr. Chairman. On behalf of everyone in the community we want to thank you for bringing the subcommittee to Denver, and it's very greatly appreciated in every way. Thank you very much.

Senator **Ford**. Well, we look forward to using the information here to help us in the future.

Thank you, gentlemen.

[Whereupon, at 11:51 a.m., the subcommittee was adjourned.]

ADDITIONAL ARTICLES, LETTERS, AND STATEMENTS

STATEMENT OF HON. HARRY REID, U.S. SENATOR FROM NEVADA

McCarran International Airport is the focus of aviation activity in Southern Nevada. As the only commercial air carrier facility in the area, McCarran serves most of Nevada and portions of Arizona and Utah. It is the 22nd busiest airport in the United States, and enplanes/deplanes some 12-million passengers each year.

The majority of these passengers are visitors. In fact, 40% of all Las Vegas visitors arrive at McCarran International. On an annual basis, these air travelers contribute $3-billion to the local economy, and fill 6.7 million room nights in Las Vegas. McCarran International is a vital and integral part of the economic base in Nevada and Las Vegas.

Owned and operated by Clark County, McCarran International is entirely self-sufficient. The Clark County Board of Commissioners acts as the airport operator for McCarran, and shares definite concerns about the issues facing this important aviation facility in Southern Nevada.

A significant problem facing all airport operators, and the traveling public, is an airline company practice that has been adopted in three places: Las Vegas, Boston, and the State of Florida. In each of these areas, a number of airline companies have imposed a ticket surcharge. In Las Vegas, nine airlines are tacking onto their airfares a $7.50 surcharge for departing passengers. The airlines have not incorporated this price increase into their basic rates, but describe the $7.50 as a separate "surcharge."

In the case of Las Vegas, airline companies defend the surcharge by describing it as a ticket price increase to offset increased landing fees and terminal rental rates that the airport charges. But in printed advertising, a number of airlines have disclosed the surcharge only in small print, or have even omitted it entirely. Airline advertisements have described the $7.50 in ways likely to lead the public to believe—incorrectly—that it is a local tax or fee imposed by the airport. Clark County Department of Aviation officials have collected numerous examples of this deceptive advertising—from newspapers read by many millions of Americans.

This deceptive scheme is disturbing not only because consumers are entitled to truth in advertising, but also because it leads consumers to believe that local airport operators have required a fee on departing passengers—which would be a violation of current federal law. It leads the public to believe that, since the fee is required, all airlines must be imposing it. But not all airlines are doing so. In this way, deceptive advertising tends to discourage price-shopping by consumers.

In addition to misleading printed ads, Clark County's officials have learned that airline representatives have responded to consumer questions over the telephone about airfares by describing the $7.50 surcharge in misleading terms or by entirely omitting any reference to the surcharge. The Las Vegas Review Journal reported on March 31, 1987, that, when its investigative reporter contacted the airlines, the reporter was told that the surcharge was a "state tax," "a tax that Las Vegas charges," and "a surcharge that the airport charges". A copy of this article has been appended to this Statement. These deceptive practices justify legislation to prohibit airlines from using descriptions of surcharges that tend to mislead the public about airfares.

The surcharge problem is magnified by the fact that the airlines involved impose their charges in a uniform amount—at Las Vegas, it is $7.50. Of course, each airline is free to control its own airfares, and each may attempt to justify its surcharge as a legitimate means of passing on its own costs. But that rationale for the surcharge is wholly inconsistent with the imposition of a uniform surcharge by carriers whose per passenger costs vary widely. Moreover, uniform $7.50 surcharges allow the nine airlines that should be competing with each other to raise prices together in an equal step. To the extent that this practice has the purpose or effect of creating a combination or conspiracy fixing prices, it violates the Sherman Antitrust Act. Federal antitrust statutes are intended to prevent competing firms from engaging in collusive practices that increase profits by reducing competition, which is now occur-

ring in Las Vegas. To allow effective enforcement of existing antitrust remedies, Congress should provide that, when competing airlines impose surcharges that are identical in amount, a combination or conspiracy exists.

STATEMENT OF HON. CHIC HECHT, U.S. SENATOR FROM NEVADA

Mr. Chairman. The Las Vegas economy is dependent on air service. Some 40 percent of all visitors to the area arrive by air, and 51 percent of all convention delegates meeting in the city utilize air carrier transportation.

As the only commercial air carrier facility in southern Nevada, McCarran International Airport is a major economic contributor to Las Vegas and the State of Nevada. More than 12 million passengers pass through this airport annually, and passenger traffic is growing 14 percent to 16 percent each year.

McCarran is also being considered as a future major hub. With California airports facing capacity problems, and seasonal weather limiting operations at airports to the east, both airline companies and the Federal Aviation Administration are looking at McCarran for future hubbing activities. The growth anticipated from such hubbing activity will produce even greater economic benefits for southern Nevada.

Because McCarran represents such a significant contribution to the local economy, any airline practice affecting the traveling public is of particular concern to McCarran's airport operators.

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STATEMENT OF JOHN S. FREDERICKSEN, EXECUTIVE VICE PRESIDENT, REGIONAL AIRLINE ASSOCIATION

I am John Fredericksen, Executive Vice President of the Regional Airline Association. On behalf of our member air carriers, I appreciate the opportunity to appear here today to present our members' views on the draft Airport and Airway Trust Fund legislation and on the National Airspace System Plan.

AIRPORT AND AIRWAY TRUST FUND

The RAA supports re-enactment of the trust fund and the companion revenue act tailored largely along the framework of the legislation that preceded it. Unfortunately, since it was first made into law in 1970, the trust fund has never quite been used as intended. This has never been more true than with the 1982 reauthorization. Expenditures from the trust fund for capital programs have lagged authorized levels by a staggering $2.2 billion. Meanwhile, the unobligated balance in the trust fund continues to grow. It is now expected to to exceed $5.6 billion by the end of this fiscal year.

The Administration has requested a two year bill that proposes to spend in the aggregate, $2.85 billion for facilities and equipment (the F & E Program), along with providing an additional $200 million to cover cost overruns in the National Airspace System Plan. In addition, the Administration is requesting, over two years, a total of $300 million for research, engineering and development (the R,E & D Program) related to NAS Plan hardware.

In our view, these levels are the bare minimums necessary to keep the air traffic control and air navigation modernization plans on their current schedules. For example, the levels proposed for F & E for FY 1988-89 must be increased in FY 1990-92 to meet programmed needs. We note that the R,E&D Program does not allocate funds for airport capacity research. We think Congress should authorize that research, so that airports keep pace with the modernization of the air traffic control system. We think $25 million is an adequate amount for this research for FY 88.

The Regional Airline Association is particularly interested in ensuring that the smaller commercial service airports served exclusively by our members be equipped on a timely basis with precision approach aids such as ILS or MLS, approach lighting systems and air traffic radars, equipment all funded out of the F & E Program. Unfortunately, FAA budget priorities have left those airports out. In many cases, the cost benefit standards FAA uses do not recognize the crucial safety improvements needed at smaller airports to guarantee passengers the same level of safety they receive when flying into major hub airports. In 1981, for example, then FAA Administrator Langhorne Bond committed to providing ILS approach aids at 127 commuter airports. To date, only 5 of those airports have received an ILS system.

The Regional Airline Association, therefore, proposes that a set-aside be established within the F & E Program to equip small commercial service airports with vital safety improvements like precision approach aids. That set-aside, we suggest, be funded at $30 million annually or 2 percent of the total appropriation. That money would go a long way toward closing the safety gap at our nation's smaller scheduled service airports.

MICROWAVE LANDING SYSTEMS

FAA proposed the Microwave Landing System (MLS) program as the precision approach system of the future. Microwave systems are proposed for 1,250 runways under the NAS Plan, fifty percent more runways than now have Instrument Landing Systems (ILSs). RAA supported the program because many of the proposed MLS locations did not qualify for ILS because of the cost benefit ratios or physical site restrictions. Further, MLS has the potential to increase capacity at congested hub airports by permitting instrument approaches for smaller regional aircraft on secondary runways too small for large jet operations.

Unfortunately, the MLS program remains one largely of promise rather than performance. Large scale deployment continues to be badly delayed by constraints in the FAA Facilities and Equipment Budget and by production problems. Much additional research and development work needs to be done before the benefits of curved or segmented approaches can be realized. MLS Category II/III capability remains five to seven years into the future. FAA originally planned to locate two-thirds of the first buy of 179 systems on runways which already had ILS, although they are reconsidering that decision.

No one, including regional airlines that need precision approach capability to the airports they serve, will purchase on-board receivers unless there is a justified need.

The slow deployment rate, coupled with the co-location of MLS on runways already equipped with ILS, will delay even further a decision to purchase MLS receivers. The Regional Airline Association continues to support MLS. However, it should be clear that fundamental changes to the MLS Program are needed if the promises are to become a reality.

AIRPORT GRANT PROGRAM

The Administration is requesting $1.017 billion annually for the next two years for federal grants-in-aid for airport construction (the Airport Capacity and Safety Enhancement Program). This level is clearly not adequate to meet the needs of an expanding aviation industry. FAA studies have concluded that at least $800-900 million annually is required to maintain the existing level of safety at our nation's airports (or to bring them up to required standards). Meanwhile, $3.0 billion worth of approved, but unfunded, airport grant applications remain on file with the FAA. If we are to close the gap on this backlog and if we are to ensure that airport capacity will not ultimately constrain our air traffic and airway modernization program, we believe the Congress should reauthorize the airport grant program at a minimum of $1.5 billion annually.

AIRPORT DEFEDERALIZATION

The Administration proposes a voluntary option which would permit airport operators with formula entitlement rights to forego that entitlement in favor of imposing their own passenger facility charges (PFCs). The RAA strongly opposes this provision. A similar provision was rejected in 1982 for good reasons. PFCs are clearly discriminatory against short haul operators; a $2 PFC has a far greater impact on a commuter passenger paying $45 than it does on a long-haul passenger paying $125. There is no relationship between the airport construction costs needed to support regional airline operations and the PFC. Regional carriers do not need extra-long runways, thick concrete ramps, or large terminal expanses, yet their passengers would pay the same PFC as passengers on the jet transports.

The Administration proposal sets no limit on the number on airports which could defederalize, nor does it limit the size of the PFC those airports would be free to charge. Further, passengers who paid the PFC would still have to pay the 8 percent ticket tax.

The airport grant program was meant to serve as an investment vehicle for a national system of airports. Since the defederalization proposal would tend to fragment that system, Congress should reject it.

BLOCK GRANTS—STATE CHANNELING

The 1982 Act provided a set-aside in the airport grant program for improvements to small commercial service airports (those receiving scheduled service and enplaning at least 2500 passengers annually, but not otherwise eligible for entitlements). Under this program, some 262 small commercial airports have received approximately $260 million over the last 6 years. The Administration proposes to retain this program at a slightly reduced funding level. However, the Administration proposes two fundamental changes in the way this money is allocated, both of which RAA opposes.

First, the Administration would carve up the already limited monies into 50 separate state allotments. Second, the Administration would permit those states with the requisite channeling authority to administer those funds. Under the current system, FAA can administer these monies in such a way as to enhance the national system, without regard to state boundaries which are of no relevance to air transportation.

The Administration proposal would undermine that systematic approach. The state channeling would split the program between the 22 states which have appropriate state agencies and the 28 which do not without serving any useful purpose. We, therefore, urge the Congress to reject the state block grant proposal.

AIRPORT ACCESS ISSUES

The 1982 legislation wrote into law, as Section 511, those sponsor assurances that deal with non-discriminatory treatment of aviation users. Since then, a series of court rulings have established that only the FAA has the authority to bring discrimination suits based on the FAA Act. Obviously, the FAA does not have the resources to intervene in every case.

RAA recommends that the re-authorization act provide for a private right of action. We also recommend that Congress continue to press FAA to publish its proposed Airport Access Policy so that airport proprietors as well as aviation users can work towards the maximum efficient use of our nation's airport and airway facilities with minimum restrictions.

NATIONAL AIRSPACE SYSTEM PLAN

RAA has supported full implementation of the NAS Plan since its inception. We think the program remains fundamentally sound, even though delayed. In our view, however, one area that is not being adequately addressed in the NAS Plan is the subject of midair collision avoidance in terminal airspace. Commuter carriers have had three midair collisions since 1981, all three of which were preventable with today's technology.

The air traffic conflict alert system is available at most major airports, but the system only functions when both aircraft involved are being operated under IFR rules. All three of the commuter midairs, as well as the Cerritos midair, occurred when a small airplane operating under VFR collided with an air carrier operating under IFR. Lack of computer capacity in the current system prohibits the expansion of the conflict alert function to include VFR aircraft.

Starting this year, the so-called Host computers will begin delivery to replace the IBM 9020s. The NAS Plan calls for the Host computers to be programmed for VFR traffic conflict alert. Unfortunately, due to the process by which the Host computer is being procured, that feature has been temporarily omitted.

VFR traffic conflict alert in the terminal environment will not be implemented until replacement of the ARTS III radars is accomplished as part of the Advanced Automation Program, now scheduled for 1995. The Regional Airline Association is greatly concerned that the NAS Plan gives no immediate priority to implementing VFR conflict alert. It is proposed now only for the enroute environment where midairs are least likely to occur. It is not contained in any specific terminal automation program, even though near miss reports demonstrate that VFR traffic conflict alert could be a significant enhancement to safety.

As an interim measure to reduce the danger of midair collisions, FAA should give high priority to re-examining the design, location and airborne equipment standards of Terminal Control Areas (TCAs) and Airport Radar Service Areas (ARSAs). In our view, the FAA should establish additional TCAs at those commercial hubs where traffic volumes warrant. In addition, the FAA should require all aircraft operating in or near TCAs and ARSAs to be equipped with altitude reporting transponders (Mode C). Second, FAA should move forward with the pilot education program announced last fall to ensure that general aviation users flying near or in controlled airspace understand the requirement and necessity to avoid inadvertent penetration.

TCAS

In 1982, the FAA selected the Threat Collision Avoidance System (TCAS) as its standard for the NAS Plan. Under the FAA program, two levels of TCAs would be developed; the first, an airline system that would warn of potential midair conflicts and provide avoidance commands to the pilot; and a second, lower cost system primarily envisioned for all other users that would provide conflict alert but no avoidance commands.

RAA supports development of TCAS. Unfortunately, practical deployment of either system remains far into the future. The TCAS I system, the low cost system that is most likely to be affordable for the regional carriers, has not been developed far enough to even begin flight testing.

The TCAS program presents great potential for the future, but midair collision avoidance cannot wait. We therefore urge the Congress to make the VFR conflict alert system a priority in the NAS plan. The FAA should update the TCA program immediately and move ahead with the pilot education program.

Thank you for your interest in the views of the Regional Airline Association. I would be pleased to answer any questions you may have.

STATEMENT OF BRUCE B. HENRY, PRESIDENT, NATIONAL ASSOCIATION OF AIR TRAFFIC SPECIALISTS

Mr. Chairman and distinguished members of this Subcommittee, I am grateful that you have provided me with the opportunity to express my thoughts and opinions relative to Reauthorization and the National Airspace System.

The Flight Service System is an integral part of the Air Traffic Control System. There are approximately 280 flight service stations throughout the United States. The personnel who staff the Air Traffic Control System are divided into three options and are designated by the Office of Personnel Management as Series 2152. They are called:

1. Air Traffic Control Specialists (station);
2. Air Traffic Control Specialists (terminal);
3. Air Traffic Control Specialists (center).

This association is designated by the Secretary of Labor as the exclusive representative of all the bargaining unit members who are Air Traffic Control Specialists (station), Series 2152. Additionally, all of these personnel are statutorily designated as Air Traffic Controllers (5 USC 2109).

While many believe the Flight Service System is only a distribution point for aviation weather products, a review of the mission, as published by the Federal Aviation Administration, describes a myriad of other functions vital to aviation safety.

FLIGHT SERVICE STATIONS

"The flight service station portion of the air traffic control system consists of an extensive network of landline teletypewriter circuits, point-to-point radio circuits, air-ground radio channels and related equipment for the exchange of air traffic control information, and for flight assistance services.

"The primary functions of the flight service station system are: (1) the provision of flight assistance (pre-flight, in-flight, and emergency) and (2) the collection and distribution of meteorological and aeronautical information. Flight service stations provide pilot weather briefings and flight planning services to all categories of civil aviation. All VFR flight plans are handled by the flight service station system. IFR flight plans are received by flight service stations and transmitted to air route traffic control centers. Flight service stations also operate the military flight service system, sending flight notification messages to the destination base operations office for all itinerant military flights. In an average year, flight service stations also take approximately half of the nation's first order civil weather observations and operate the aviation weather telecommunications system."

An example of this performance may be found in the following chart, which provides information relative to flight assists (when pilot, crew, and passengers are in jeopardy) or "saves" by Air Traffic Control Specialists over a time span of six years. Please note that percentages for Flight Service are very high when one considers that the system is only endowed with one-fifth of the total controller work force.

FLIGHT ASSISTS

Calendar year	Total	People on Board	Flight service system	Terminals	Centers	Flight service system—percent
1980	2,695	5,413	954	1,206	535	35.4
1981	1,933	3,654	867	777	289	44.8
1982	959	1,899	462	358	139	48.2
1983	1,005	2,323	459	406	140	45.7
1984	1,069	2,852	404	467	198	37.8
1985	1,181	2,093	436	529	216	37.0

Source: Hearings records of the House Appropriations Subcommittee on Transportation

A very serious problem in the Flight Service System is the shortage of personnel necessary to fulfill the requirements of FAA's stated mission.

In Fiscal Year 1987, the system suffered a loss of 185 positions. The Flight Service System is now operating with 4410 positions, while only a few years ago there were 5100 positions in the system. In testimony before the House Subcommittee on Aviation (99-60), the FAA stated that they had recommended 4717 positions to the Department of Transportation for Fiscal Year 1987. Accordingly, the system is now operating with 307 positions below the FAA's stated requirements.

To follow on, the Administration's request for Fiscal Year 1988 is a reduction of an additional 185 positions, making the system 492 below FAA's requirements.

With the House Appropriations Committee (99-704) reporting that no personnel savings have been achieved in the consolidation program, and that the private sector is providing only 1.3 percent of all pre-flight services, we have every reason to doubt the Administration's unsupported justifications for their recommended and drastic personnel reductions.

While the Federal Aviation Administration and the Administration are telling the Congress that all is well, and they can handle the Flight Service System with fewer positions, they are telling the user an entirely different story in a publication entitled: United States Government Flight Information Publication—Airport/Facility Directory, published by the U. S. Department of Commerce, with input by the FAA.

Of significance are a few excerpts from that document:

TEMPORARY FSS CLOSURES/REDUCED HOURS

East Central U.S.

Due to personnel shortages, The Federal Aviation Administration has temporarily closed or reduced operating hours for an extended duration at the following Flight Service Stations:

Reduced operating hours: Houghton, MI.

North Central U.S.

Due to personnel shortages, the Federal Aviation Administration has temporarily closed or reduced operating hours for an extended duration at the following Flight Service Stations:

Reduced operating hours: Chadron, NE, Chanute, KS, Dodge City, KS, Emporia, KS, Closed: Hill City, KS, Ottumwa, IA, Sidney, NE, Vichy, MO, and Watertown, SD.

South Central U.S.

Due to personnel shortages, the Federal Aviation Administration has temporarily closed or reduced operating hours for an extended duration at the following Flight Service Stations:

Reduced operating hours: Abilene, TX, Alice, TX, Carlsbad, NM, Childress, TX, Dalhart, TX, Deming, NM, El Dorado, AR, Gage, OK, Harrison, AR, and Hobart, OK.

Also Lake Charles, LA, Las Vegas, NM, Lufkin, TX, Midland, TX, Mineral Wells, TX, Palacios, TX, Ponca City, OK, Truth or Consequences, NM, Tucumcari, NM, and Wink, TX.

Northwest U.S.

Due to personnel shortages, the Federal Aviation Administration has temporarily closed or reduced operating hours for an extended duration at the following Flight Service Stations:

Reduced operating hours: Baker, OR, and Rawlins, WY.

Southwest U.S.

Due to personnel shortages, the Federal Aviation Administration has temporarily closed or reduced operating hours for an extended duration at the following Flight Service Stations:

Reduced operating hours: Akron, CO, Blythe, CA, Crescent City, CA, Daggatt, CA, Imperial, CA, Marysville, CA, Thermal, CA, Tonopah, NV, and Ukiah, CA.

Closed: Lovelock, NV, and Montague, CA.

With the consolidation program on the leading edge of implementation; with the installation of Model I equipment; with the relocation of hundreds of employees and their families; with a vast retraining program; and with proposed personnel reductions, we fail to see how the FAA can possibly comply with the provisions of 49 USC 2224, which requires "as good as or better than the service provided when the station was open . . .".

We recommend that:

The personnel positions authorized and funded for the Flight Service System in FY 1988 be established at 4,717, as recommended by the FAA to the Secretary of Transportation for FY 1987.

Flight service stations, which have been closed or part-timed due to personnel shortages, be restored to original manning levels in effect prior to the closing or part-timing action.

The recent action by the House Appropriations Committee in its Report on the 1987 Supplemental Appropriations Bill (Report 100-28 of March 25, 1987) will have a long-range and beneficial effect on the entire Flight Service Modernization and Consolidation Program.

The language is quoted:

FLIGHT SERVICE STATION CONSOLIDATION

"The Committee directs the FAA to halt any further closures of flight service stations and consolidations of those stations unless the service area will be served by an automated flight service station with Model I or better service."

Now for the first time we have illuminating language which specifically defines the meaning of "equal or better service" as set forth in 49 USC 2224. This is an excellent definition which enables all parties concerned to easily determine the meaning of "equal or better" and can be applied to every flight service station on a case by case basis.

Furthermore, we see this language providing guidelines for the orderly accomplishment of the Modernization and Consolidation Program. It fits in exactly with our long-held position of "modernize first, then consolidate." We applaud the House Appropriations Committee for this action.

At the present time, there are thirteen Flight Service Data Processing Systems (FSDPS), operating or planned, located at thirteen enroute air traffic control centers. The FSDPS are the computers and auxiliary equipment which drive and provide information to the Model I Automated Flight Service Stations (AFSS).

Concurrently, there are 37 AFSSs operating or planned, which are designed to retail aviation products and other information to the user pilot.

It is important to note that these 37 Model I AFSSs completely utilize the full capability of the 13 FSDPS.

Stated another way, the present FSDPS installations cannot support more than 37 Model I AFSSs which is all in accordance with FAA's overall plan.

As you have heard many times, the FAA plans to have 61 AFSSs in order to cover all of the geographical areas.

The NAS plan calls for Model II to come on line at this time and be installed at the 24 remaining AFSS sites.

As we all know, Model II is years behind schedule, even to the extent that the Congress has withheld funding until some meaningful clarification can be provided by the FAA. The General Accounting Office is currently conducting a study of this subject.

So, we are now at a major decision point for the FAA's Flight Service System.

Realizing the current situation, the Federal Aviation Administrator has submitted a proposal to the Chairman of the House Appropriations Subcommittee on Transportation in his letter of February 17, 1987.

One paragraph, which is quoted, outlines the proposal:

"This plan would deploy the hardware already purchased under the existing contract to all 61 AFSS locations. The new system configuration would consist of four computers as opposed to the three-computer configuration of the current Model I system. It would require software development to enable the Model I softward presently used in AFSS's to properly function on the new hardware configuration. We would be adding only system capacity and not any additional functional capabilities. The enclosed table is a comparison of the system configuration and capabilities of the current Model I system, the proposed full capacity Model I (MIFC) system, and the Model 2 system."

Please note that this proposal only increases capacity and does not add any functional capabilities to Model I.

With this proposal, it would be necessary to add capacity to the FSDPS installations at the enroute centers. This increased capacity would, in some cases, provide for, not only the 61 stations but also, additional modest AFSSs in unique geographic locations where a requirement may develop after the 61 station locations are operating. This would be consistent with FAA testimony before the House Subcommittee on Aviation in June, 1986 (99-60 page 269).

"With the 61 fully active, automated stations in operation, we wll determine if any of the other facilities should remain longer in the inventory. At this time, it is too early to tell what will be needed to assure the proper level of service in all instances."

Your attention is invited to the FSAS Comparison Chart enclosed with the Administrator's letter of February 17, 1987. You will note that Model I Full Capacity (MIFC) has the same capability as the existing Model I, but falls far, far short of the elusive Model II, which embraces sixty-nine additional functions not found in Model I.

Some insight may be obtained from the 1987 House Appropriations hearings with FAA witnesses (page 811, part 6):

"Mr. Lehman. Since weather graphs and DUATS can be independently added to flight service stations now, what is left for Model 2 to do?

(The information follows:)

The baseline Model 2 System must provide centralized receiving, processing, editing, distribution, maintenance and archiving of alphanumeric weather messages including national base maintenance.

Sixty enhanced or new capabilities are made available to the specialist to improve and expedite services to the user and to reduce editing tasks.

"Mr. Lehman. What is the difference in the amount of money which could be saved and redirected between canceling all of Model 2 and canceling only Model 2 DUATS?

(The information follows:)

Approximately $2 million of F&E funds will be saved if we use existing private sector technology to satisfy our requirements for DUATS. No money would be saved for the yearly operating costs for a DUAT system. Although between $50-60 million of F&E funds could be saved if the Model 2 program were canceled, it would result in higher overall costs to the FAA.

The FAA would never be able to realize the benefits to be gained from full automation and consolidation if the Model 2 program were canceled. A Model 2 cancellation would require the FAA to continue to staff and operate a highly labor intensive and decentralized system of over 200 FSS's."

The fifth paragraph of the FAA Administrator's letter raises some questions and is quoted:

"We believe that no matter what the outcome of the GAO study it makes sense to proceed with this approach. Any funds expended on this plan will not be lost. If the results of the GAO study are positive, as we believe they should be, the additional software functions could be incorporated into MIPC at some future time. On the other hand, if the results are negative, we will still be able to complete the automation and consolidation aspects of the program by implementing MIFC."

Since this program has been stumbling along since the 94th Congress and fraught with problems at every turn, we believe the term "future time" should be defined so that all concerned parties will know when completion is anticipated.

Furthermore, we would like more definition of the term "additional software functions" so that a realistic comparison can be made between MIFC and Model II.

We have a deep and abiding interest in making sure that our journeyman have the very best aviation safety tools to carry out their safety missions and responsibilities.

Thank you Mr. Chairman and members of this Subcommittee.

STATEMENT OF JONATHAN HOWE, PRESIDENT, NATIONAL BUSINESS AIRCRAFT ASSOCIATION, INC.

Mr. Chairman and Members of the Subcommittee: Thank you for allowing me the opportunity to appear before you today. I am Jonathan Howe, President of the National Business Aircraft Association, Inc. (NBAA), which represents the aviation interests of American Business. Our 2900 member companies own and operate aircraft for use in meeting their daily business transportation requirements. As they are regular users of the airspace and of airports, reauthorization of the expiring Airport and Airway Improvement Act of 1982 is of vital importance to us.

At the outset, I wish to commend the Chairman, the Ranking Minority Member and members of the Subcommittee for this series of hearings. We are confident that the dialogue and information gained through them will provide the insight and consensus you will require in the coming months.

OVERVIEW

The overall objectives of the reauthorization process must be to ensure continued modernization of the National Airspace System and the network of airports as a means to enhance safety and increase capacity. Realization of such a goal would secure the future growth, enhance the safety of and improve the contribution made by civil aviation, as an integral part of the economy, to the nation's economic well-being. Since this goal can be met without use of general revenues, the benefits to the nation as a whole argue strongly in favor of legislation which emphasizes growth through modernization and increases in capacity. The expiring 1982 Act has worked relatively well. At the same time, legislation to reauthorize it should be designed to correct the few faults that have been brought to light in the past years.

Foremost among these faults is a failure to ensure that funds deposited into the Airport and Airway Trust Fund are expended in a timely manner. While past underfunding has been, in part, rationalized to be a result of design and procurement delays, application of budget constraints designed for programs funded from general revenues is largely responsible. Quite simply, the strong need for existing aviation funds to be spent has been overpowered by interest in more politically popular programs such as Amtrak, interstate highways, mass transit and the Coast Guard. In the past, this unfortunate occurrence has been but a major inconvenience. Now, however, the vast majority of the delayed and underfunded programs appear to be ready to move forward, increasing competition among them for the funds available.

Because we are at such a critical juncture, a "business as usual" approach to the budgeting and appropriation of monies for airport and airway improvement in the coming years will result in damage an order of magnitude greater than that suffered in the past. The continued application of artificial budget constraints applied to a funding mechanism which is separate and apart from others and which has never been at a deficit will further delay these improvements, ultimately increasing costs to the general public and airspace users alike while decreasing anticipated benefits. The reauthorization process must culminate in legislation designed to resolve these funding problems. Deficit-proof, user-funded programs must be freed from the Federal budget process for general revenue expenditures.

At the same time, some "fine-tuning" of the 1982 Act would make it more responsive to the requirements of today and those of the future. Thus, the following issues are of great importance to business aviation in the reauthorization process:

The Airport and Airway Improvement Act of 1982 must be reauthorized by its expiration date of September 30, 1987, and should include a program five year's duration.

The chief goal of reauthorization must be to make significant advances in the safety and capacity of the national system of air transportation.

A mechanism is required to ensure that revenues are spent for the purposes intended or that tax rates are reduced.

The existing formula for allocating Trust Fund monies for FAA's Operations and Maintenance (O&M) expenses is equitable but should not be increased.

Airport development funding must be increased to meet traditional needs and to expand capacity at constrained airports.

The Federal interest in promoting interstate air commerce must be strengthened to preempt state and local authorities who attempt to regulate aircraft noise and airport use.

FAA regulations limiting access to the so-called High Density Traffic Airports should be eliminated.

The "carry-over" of entitlement funds by large airports, which limits the availability of airport funds and encourages spending on projects unrelated to capacity improvement, must be added.

Reauthorization should include a "pilot program" of limited funds to enable civilian operators to use and be based at several military airports around the country.

Allow me to expand on these points.

TRUST FUND ISSUES

The Calendar

The Airport and Airway Act of 1982 must be reauthorized by its expiration date of September 30, 1987, and should include, at a minimum, a program of five year's duration. Failure to accomplish reauthorization by September 30 will result in much-needed modernization and capacity improvement projects being delayed, further increasing total program expense, decreasing cost-benefit ratios and eroding user support.

Additionally, proposals to limit the life of the reauthorization to two years, if successful, will ultimately harm the modernization effort. Uncertainties related to the availability of funds, the Federal commitment to modernization and "micro-management," which would result from failure to enact a traditional five-year program, would wreak havoc on what has been, for the most part, an orderly process. We note that Deputy Secretary Burnley, in his recent appearance before this Subcommittee, stated the Administration would not object to an authorization of greater duration than it has proposed.

Many have used the anticipated report of the Aviation Safety Commission as a reason to shorten the program's length. This reasoning is faulty at best as there is no guarantee the Commission will have completed its work by that time. This reasoning further assumes the Commission's contributions will merit or even be oriented toward solutions lending themselves to legislation.

In sum, long-range goals require long-range planning. The quite reasonable Congressional requirement for ongoing oversight and "mid-course" corrections in the program can be assured without such a change.

The Trust Fund Surplus

At the close of January, 1987, the balance in the Airport and Airway Trust Fund totaled $9.134 billion. Of this amount, some $5 billion is unobligated. The Administration's solution to this national disgrace is to sharply increase the amount of Trust Fund monies destined to cover ever-increasing portions of operational costs, discontinue payments of interest on the balance in the Trust Fund, allow modest increases for capital improvements and eliminate the "penalty clause."

In response, we would not presume to tutor this Subcommittee on the long history of such "raids" on the Trust Fund for the purpose of diverting capital improvement monies for the operational expenses of the FAA. Instead, we would simply maintain that the placing of artificial limitations on funds for capital improvement in order to cast the Federal budget deficit in a slightly better light must not be allowed to succed.

The Administration has proposed that 85% of the FAA's operational expenses be provided from the Trust Fund. Such a proposal should be rejected out of hand as without merit and violative of the nature of trust funds for capital development purposes. Any expansion of this portion would be detrimental to meeting the critical safety and capacity improvement needs which exist. Enactment of such the Administration's proposal would constitute a gross breach of trust with users who have faithfully paid into the Trust Fund, expecting their money to be used for improvements, and would completely ignore the substantial benefits accruing to the general public from a safe and efficient national air transportation system.

The "Penalty Clause"

The existing "penalty clause," which limits expenditures from the Trust Fund for operational expenses has served its purpose admirably and should be retained. Indeed, the simple fact that the Administration opposes the penalty clause as too restrictive on its desires is reason enough for its retention.

The penalty clause needs redirection, however. Reauthorization must include strengthened mechanisms to ensure that modernization and capacity needs are met before administrative and cosmetic ones. One of the best incentives for both the Congress and the Administration would be a reduction in excise taxes when appropriations do not meet authorized levels. Toward this end, we lend our support to bills such as H.R. 8. Programs funded by receipts from user taxes, such as those from FAA's capital investment, should be removed from the unified budget for separate consideration on their merits, not as part of the same general revenue "pie." Consequently, we also fully support S. 784.

THE AIRPORT IMPROVEMENT PROGRAM (AIP)

Overview

Increasingly, commercial and non-commercial operators alike are finding that the finite limits to airport capacity severely limit growth which otherwise can be accommodated in the airspace. If the ongoing modernization of air traffic control, surveillance and communications equipment is to realize its ultimate potential, airport capacity must be increased. New airports and additional runways are needed now, as are more reliever and commercial service airports, especially in congested major metropolitan areas.

Increases in AIP funding are, therefore, essential. Given our current crisis in system capacity, the Administration's "business as usual" funding level of $1.017 billion for their two-year reauthorization bill is insufficient. In addition, emphasis must be placed on those projects which, upon completion, will have a readily identifiable and positive impact on safety and capacity. For too long, AIP funds have been used by airport sponsors for the construction of access roads, terminals, baggage handling facilities, beautification and the like. Millions of dollars have gone into such projects while safety- and capacity-related needs have either gone unmet or have been delayed. As various studies and indicators demonstrate, many more dollars are available for airport improvement from the private sector than are available from the Federal government. Funds from such private sources should be used for non-capacity or non-safety related purposes, leaving Federal dollars for safety and capacity only.

Entitlements

An additional issue which should be addressed in reauthorization is that of the "carry-over" of entitlement funds by large airports. The "carry-over" occurs when an airport sponsor's inability to allocate this year's entitlements, a most unfortunate term, results in their being added to next year's. The effect is to "soak up" discretionary funds which could be used by other airports, thus limiting and, in some cases precluding, their participation in the AIP in a given fiscal year. In FY 1987 alone, this and a chronically low funding level combined to limit discretionary funding to a paltry $34 million. We ask this Subcommittee to end this practice, which artificially limits the availability of funds to other airports and encourages spending on projects unrelated to capacity improvement. The very real requirements for safety and capacity improvements at all types of airports argues heavily in favor of their elimination now by enactment of a "use it or lose" clause for all entitlements.

State Block Grants

The Administration has proposed a program whereby 22% of AIP funds would be made available to the various states through a block grant designed for small commercial service, reliever and general aviation airports. The availability of the block grant would be limited to those states which can demonstrate they have adequate resources and expertise to reliably and efficiently administer such a program. As a means of maximizing the effectiveness of what is likely to be a limited amount of AIP funds, we support such a proposal. However, airports so funded must continue to be subject to the various grant assurances imposed upon recipients of development grants directly from the FAA. In addition, restrictions should be included which prevent such monies from being used for purposes not related to airport capacity or safety.

Airport-Optional Defederalization

One of the more controversial portions of the Administration's proposal is for an airport-optional defederalization program, whereby any airport may choose to discontinue participation in the AIP and levy its own Passenger Facility Charge (PFC), or "head tax", on passengers using the airport. We oppose such a proposal.

First, a very real danger exists that airport operators would use a PFC to discriminate against certain classes of users. Examples include discriminatory landing fees which have been used to restrict certain classes of operators. Additionally, the total user tax burden carried by users—business and general aviation, airline passengers and shippers—would increase without identifiable gains in service, safety or capacity.

Finally, as the Administration is proposing that total program funding be reduced by an amount equivalent to the entitlements relinquished, there is a potentially serious loss of funds available to the AIP because airports which are likely to opt out represent a disproportionately high share of the total funding in the program. We urge the Subcommittee to decline to include such a proposal in final legislation.

Joint Use of Military Airfields

Reauthorization should include a "pilot program" of funds to enable civilian operators to use and be based at military airfields located in metropolitan areas where more runway capacity is needed. For years, civilian and military aviation authorities have argued about the feasibility of allowing civilian use of military airports. As a consequence, the 1982 Act directed the Secretaries of Defense and Transportation to submit a plan for making domestic military fields available for joint military and civilian use. A General Accounting Office Report dated March 1, 1983, contained several recommendations to the Secretaries. On March 8, 1984, the Secretaries issued a document entitled A Plan for Joint Use of Military Airfields, which presented a study conducted by a DOD contractor of 25 military airfields selected by the FAA resulted in DOD's agreement to consider joint use at but two of the 25 airfields. The DOD maintained it would consider joint use only if a formal proposal was submitted by an airport sponsor eligible to receive Federal AIP funds.

Since that time, very little has happened in this area, partly because no tangible incentives exist for many potential sponsors but mostly due to intransigence on the part of the military, which is unwilling to consider any joint use concept until after a military airfield is declared excess property.

Reauthorization should take the initiative and move boldly ahead to provide funds for and mandate that a fixed number of military airports be opened to civilian users. Optimally, the candidate airports would be located in metropolitan areas lacking suitable civilian airports in a close proximity to the urban center. We would be pleased to provide the Subcommittee a list of military airfields the joint use of which would greatly contribute to alleviating congestion at existing civilian airports.

High Density Traffic Airports and Airport Access

The FAA regulations regarding access to the so-called High Density Traffic Airports (HDTA) should be eliminated. Since their inception as an "interim" regulation in 1969, the HDTA rules (14 CFR 93, Subpart K) have been relied on to artificially stifle demand at the affected airports. Through these rules, a disincentive for investment in safety- and capacity-related improvements has been created since, by regulation, no net increase in instrument flight rules (IFR) operations can legally occur. This has come about even while millions of dollars in Federal funds have been poured into these airports since 1969. Despite this investment, no net gain in capacity has been realized and these airports remain as congested as ever.

Recent proposals to repeal the "buy-sell" rules or "jawbone" air carriers into shifting their schedules fall victim to the same "business as usual" failure to understand the root problem—continuation of artificially-imposed limits on capacity which have never been in the public interest. Instead of seeking to limit capacity, and thus access, through continuation of the existing rules or redistribution of existing access through "buy-sell" rules or mandated scheduling changes, Congress should mandate repeal of the HDTA rules, thus providing economic incentive for renewed investment in the affected airports and, in the long-term, enhancing system-wide capacity.

Strengthening the Federal Responsibility for Interstate Air Commerce

The Federal interest in promoting interstate air commerce must be strengthened to preempt state and local authorities who attempt to regulate aircraft noise and airport use. The importance to the national economy of our highly developed system of air commerce cannot be overemphasized. Among the major threats to its continued viability are challenges to the Federal authority to regulate interstate air commerce brought by various states and local jurisdictions. These challenges take the form of attempts to limit airport use to certain times of the day, to certain types of operation or by outright closure of an airport.

Federal policy must be developed which considers local concerns against the broader and more predominant Federal interest in a comprehensive national system of air commerce. In the past, these challenges have been met by user groups, airport proprietors and commercial carriers in an effort to protect their interests, even though no private right of action exists with respect to certain challenges, such as abrogation of sponsors assurances under the AIP. Only recently has the FAA become actively involved in attempts to promote the Federal interest in the national system and the degree to which the FAA involves itself is not yet sufficient.

Business aircraft operators are able and willing to work with localities on ways to improve approach and departure routings and procedures to avoid residential areas. NBAA's Quiet Flying program and noise abatement procedures have been proven to alleviate many such concerns. However, these procedures must be allowed to work.

THE FACILITIES AND EQUIPMENT PROGRAM

Overview

We support a strong program for Facilities and Equipment (F&E) paid for through the Airport and Airways Trust Fund. Full funding of all of the projects listed in the National Airspace System Plan is essential to the healthy development of the capacity necessary to meet the needs of air commerce for the foreseeable future. We therefore recommend full implementation of the Plan, with first priority given to those programs which will provide improvement in the margin of safety for operation in the nation's airspace. Next in priority should be those programs which will provide for the greatest incremental gain against the problems of delay and congestion in the airspace and at the nation's airports. Finally, programs which provide for efficiency in the operation of the air traffic control system, and which have been omitted from the Plan itself, should be accomplished in the most timely manner.

The following points are key to the modernization effort and are of great interest to business aviation:

The modern, high-speed computer hardware found in the Host Computer program is essential for the management of today's—and tommorrow's—complex air traffic control system.

NEXRAD and Terminal Doppler Radar for weather observation are critical to aviation safety.

The Automated Flight Service Station (AFSS) program has resulted in poorer service to users.

Automated Weather Observation System (AWOS) will not fill the valid aeronautical need for winds and altimeter settings.

Redirection of the Microwave Landing System (MLS) program is urgently needed.

The Area Control Facility (ACF) concept seems to be headed for the same problems as have beset the Automated Flight Service Station (AFSS) program.

While not specifically included in the NASP, the two programs mentioned below are of interest in this discussion as they hold great promise in the area of capacity improvements without large expenditures of funds through efficient management of existing resources:

Reduction of the lateral separation for parallel approaches in Instrument Meteorological Conditions holds the promise of improved airport capacity.

Traffic Management and Flow Control improvements need attention and funding they cannot receive because they are not "Brown Book" programs.

Safety-Related NASP Programs—Flight Service Station Modernization

Flight Service Station (FSS) modernization has resulted in poorer service to users. Although many business aircraft operators now bypass the FSS and rely on commercial sources for weather briefings and flight planning, they still must contact an FSS to obtain certain services in flight and to file flight plans. FAA is currently closing FSSs around the country without providing automated stations to replace the necessary services lost. Worse still, the new facilities are being commissioned with the old equipment, which lacks the promised automation, providing the user with the worst of both worlds. The FSS modernization program needs serious management attention, and should be redirected in a manner to permit the customer to take full advantage of commercial services including direct access through user-operated terminals.

NEXRAD and Terminal Doppler Radar

These important tools for weather observation are critical to aviation safety. Severe weather is a factor in many aviation accidents. Improvements in the quality and quantity of weather observation locations and in near real time weather dissemination to flight crews should be integrated with the clearly understood goal of reducing the number of weather related accidents.

Automated Weather Observation System (AWOS)

AWOS will not fill the valid aeronautical need for winds and altimeter settings. An urgent, safety-related but unfulfilled need exists for automated observation and transmission of local barometric pressure and wind velocity data at airports not served by control towers, or during periods when towers are not in operation. Present programs address the development of fully automated weather observation systems which will serve only to substitute for manual observation at airports with towers, obscuring user requirements for the simple, low cost, current-technology systems. This is despite an urgent safety need at many smaller airports where FAA proposes to eliminate instrument approach procedures because of no local altimeter setting. Incredibly, FAA does not contemplate installation of AWOS at those airports.

NASP Programs Which Address Delays And Congestion—Host Computer

Modern, high-speed computer hardware is essential for the management of today's complex ATC system. Much of the delay in the en route air traffic system results from control techniques and computer limitations which keep aircraft apart from one another by separating them with huge blocks of airspace and keeping them clear of airspace reserved for specific control facilities or controller positions. Modern hardware is essential to development of air traffic control procedures which will provide optimum separation of aircraft and provide for the most efficient use of the available airspace. The Host Computer is the essential foundation of this effort.

Microwave Landing System (MLS)

The MLS is a program in trouble. It is significantly behind schedule, but more to the point, woefully behind users' expectations for increases in the number of precision approaches. The program needs serious redirection, including the immediate installation of ILS systems to fill the gap in an otherwise orderly progress, seriously interrupted by system development delays already encountered. Further to the point, implementation should be tailored to provide the maximum gain in aeronautical capability. Users generally agree that the installation of MLS on runways already adequately served by ILS is a gross misuse of valuable assets and provides no aeronautical gains.

Area Control Facility

Under the Area Control Facility (ACF) program, approach control facilities in certain geographic regions would be consolidated. However, no universal user agreement that ACF is a beneficial program exists. In order not to repeat mistakes made in the consolidation/modernization of FSSs, an implementation plan must be developed to address user and controller concerns that ACFs can adequately replace today's en route and terminal traffic control system. An orderly transition program must be established so as to assure users that critical services will not be lost, something FSS modernization has sorely lacked.

Programs Not Included In The NASP—Reduced Longitudinal Separation of Simultaneous Parallel Approaches

Reduction of the lateral separation for parallel approaches in Instrument Meteorological Conditions holds the promise of improved airport capacity. In order to achieve this, new sensors must be procured as current FAA radars are not accurate enough to do the job. An extensive development program is not necessary, but off-the-shelf hardware should be selected and bought.

Traffic Management and Flow Control

Traffic Management and Flow Control improvements need attention and funding they cannot receive because they are not "Brown Book" programs. New methods of managing traffic have been studied by FAA air traffic control people, but absent a specific NASP program, the Department of Transportation and the Office of Management and Budget have been reluctant to approve funding. Provisions should be made in the NASP for short-term, innovative solutions to persistent problems in traffic management.

CONCLUSION

In sum, we are convinced the reauthorization process hold great promise for Congress to address the myriad but soluble problems which currently exist in aviation development programs. Airport development funding is inadequate. Mechanisms must be enacted which ensure that funds previously received from users through taxes are spent for the purposes intended. As an integrated plan, the NASP is behind schedule and underfunded. However, more distressing is the fact that the various pieces which comprise the NASP are the victims of inadequate management and are, in some cases, solutions in search of a problem. If much more delay is suffered, benefit-to-cost ratios will sag further, making justification on such a basis next to impossible. Better management, on the part of the FAA, and ready sources of funding from the Congress will alleviate many of these problems. We stand ready to assist this Subcommittee and the FAA in the development of appropriate solutions.

Thank you again for the opportunity to present this statement.

STATEMENT OF J. E. MITCHELL, JR., EXECUTIVE DIRECTOR, HUNTSVILLE-MADISON COUNTY AIRPORT AUTHORITY

Mr. Chairman and members of the Subcommittee on Aviation, please be assured of our appreciation for this opportunity to testify before you on reauthorization of the Airport and Airway Improvement Act, which is so vital to the continued development and improvement of the airports of this country that serve the public convenience and necessity in air transportation.

I will not dwell on the need for reauthorization of this legislation, as I feel such is unnecessary. I will, however, touch on a limited number of issues that are extremely important to that segment of airports that we not only are characterized as being a part of, but also represent. In so doing we feel we will make some suggestions that will be beneficial across the board.

We are identified in the present legislation as "Primary Airports." We are further identified as one among those airports that enplane .01 percent or more of the total number of passengers enplaned annually at all commercial service airports, but less than 0.25 percent. We are, more often than not, referred to as "Small Hub Airports." At present day traffic levels we are those airports that enplane 40,000 to 1,000,000 passengers annually.

The Huntsville-Madison County Airport, Huntsville, Alabama is just about in the middle of that stream of small hub airports, enplaning 378,000 passengers this past year. The enigma of this classification is that under the present criteria you can enplane five million passengers ten years from now, but still be classified as a "Small Hub Airport." Rather ridiculous, don't you think?

Because we are "Small Hub Airports" we get 90/10 funding, except for eligible Airport Terminal Development projects. The "Big Airports" get 75/25 funding.

With the Trust Fund bulging with over $5.5 billions in unappropriated funds, we strongly recommend the United States share of eligible project be ninety percent.

The Interstate Highway System is not funded based on whether it is a Big Interstate Highway or a Small Interstate Highway. Why? Because you are building a system. The flaw we are addressing is that we have not been building a system of airports. DOT Secretary Burnley and FAA Administrator Engen both testified before The House Committee on Public Works and Transportation Subcommittee on Aviation that the National Airport System Plan as required by Congress several years ago had been completed but it was simply a compilation of airports that had received federal assistance from the Trust Fund—not even a paper maché system, only a catalogue of airports at best. Furthermore, because there is no criteria for what constitutes an airport, we have very little assurance of what we have been building, and little room to assume we know what we have been funding.

90/10 funding, however, is the place to start insofar as funding is concerned, if indeed we are to take a system approach.

A more serious flaw, especially insofar as small hub airports are concerned, is the method or formula by which the annual allocation to an airport is calculated. It is based solely on the enplaned passenger count and while the consensus is the small hub airports are getting the best end of the deal in this situation, such could be further from the truth. Small hub airports have very little or no transfer traffic. Consequently, the allocation is based upon what the small hub airport can originate. The big hub airports, however, get to count not only their originating traffic but all of the transfer traffic from the small hub airports, double dipping so to speak. If you can explain to me how we get the best end of that deal, I will be more than happy to give you my undivided attention. The transfer traffic at most if not all of these large airports, incidentally, far exceeds their originating traffic.

This passenger syndrome even influences the conclusion that airports that do not have a great deal of traffic, such as the small hub airports, do not, therefore, need as much airport as those airports that have a lot of traffic. I talked to the Boeing 727 that I flew from Huntsville to Washington in a few weeks ago and he told me that that was absolutely not true; that he needed just as much runway in Huntsville as he did at the Washington National Airport. In fact, he said, I wish they had your runways at Washington National.

We have an obvious flaw in the classification of airports; we have a flaw in the funding ratio; and we have a flaw in the method and formula of funding as it is making no contribution whatsoever to the building of a system of airports as it is based upon passengers and not on what an airport should be. If you are going to stick with the present method and formula of funding to an airport, then for the small hub airports you are going to have to double or triple or quadruple the funding. We mentioned that our facility is about in the middle stream of small hub airports. We were allocated during the past five years less than one million dollars per year and there is no way you can build very much airport with that kind of money.

Before you rush to the conclusion that by quadrupling our allocation we would be receiving far more than we would be contributing to the Trust Fund, let me reveal to you a rather startling fact. This year we will enplane approximately 400,000 passengers and contribute approximately $16 million to the Trust Fund. Since 1963 we have received a grand total of $19 million from the Trust Fund. In 1967 we, therefore, expect to contribute to the Trust Fund almost as much money as we have received from it over the past 23 years. Small hub airports have not been the recipients of economy fares—they are reserved for the high density airport to the high density airport. My round-trip ticket from Huntsville to Washington, a distance of about 615 miles, a few weeks ago was $460. The round-trip ticket from Huntsville to Nebraska recently was $655. One of our directors traveled from Huntsville to Chicago, a 475 mile trip, and the cost was over $400. The round-trip ticket from Huntsville to Atlanta, a distance of 175 miles is $250. From Huntsville to San Jose, round-trip, is slightly less than $1000. Of course, if the fare wars are on and you make your reservation one year in advance, spend Saturday night in Pharohs Tomb, then you can fly for a fairly decent cost.

Again, we did not build the countrys Interstate Highway System based upon how much highway a particular section in the country was allocated based upon population. First there was a system and then there was a criteria for that system. Small hub airports, if we are going to be classified in that degrading manner, are going to have to be funded at a considerably higher level, otherwise we are going to perpetuate our airport density problems. The small hub airports of today will be your large hub airport of tomorrow. We are suffering this very day due to such a miscalculation, finding the small hub airports of yesterday are simply not prepared to handle the traffic being thrust upon them today.

Airport terminal development, the exception to 90/10 funding, has been severly restricted with the respects to the utilization of entitlement allocations from the Trust Fund. Discretionary funds, incidentially, have not been allocated for terminal development at all, to the best of my knowledge. We all know, now, that airport terminals are just as much a part of an airport as are runways and taxiways—a rose is a rose is a rose, but an airport without adequate terminal facilities is not an airport. Airport landside capacity has come to the forefront with such a rush that the Transportation Research Board of the National Research Council has underway a study in the connection. Free entry has created a new terminal ball game in our deregulated air transportation environment. And the hub and spoke system has made us "Small Hub Airports" attractive, all of a sudden. A hub without any spokes just ain't no hub at all.

Under the present legislation, Section 513, Project Cost, not more than the greater of $200,000 or 60 percent of entitlement funds can be used for terminal development in any one fiscal year, and the funds that are usable must be matched 50/50. Somewhere there was a feeling that airport sponsors would rush to use the money to build Taj Mahal terminals, even though the Act clearly states that funds cannot be used for terminal development unless the airport sponsor certifies that all airport safety and security equipment required by rule or regulation has been provided and that the airport is capable of accommodating both aircraft and enplaning and deplaning passengers.

To correct this particular flaw in the use of Trust Fund Entitlements for Airport Terminal Development, so it will not occur in any reauthorization of the legislation in question, the necessary surgery is of little or no consequence, and does not hurt at all. Under Section 513, Project Cost, Subparagraph (b)(2) needs to be eliminated as does Subparagraph (b)(5). Eliminating Section 513 (b)(2) does away with the limitations of not being able to utilize more than sixty percent of one's entitlements during any one fiscal year for terminal development and the elimination of Section 513 (b)(2) strikes the 50/50 matching fund requirement, therefore, leaving the matching requirement at 90/10.

Let me quickly point out that this does not, I repeat, does not entitle small hub airport operators to any more money out of the Trust Fund—it simply gives us the flexibility to use the federal assistance that is allocated to us under the entitlement formula without the financial burden of matching federal aid for terminal development dollar for dollar. Small hub airports do not generate the revenue to meet dollar for dollar matching requirements. At the larger airports the airlines have to subsidize terminal development or build their own terminals, and while this may not necessarily be good, and I don't think it is, these same airlines are unwilling to underwrite anything at the vast majority of the small hub airports. If they did, they would want exclusive use and a plague would probably be more sufferable.

Last but not least, Mr. Chairman, small hub airports need a five year program versus the talk of a two year bill. For us a five year program is a financial necessity. While planning is key in this scenario, the real key is the ability for small hub airports to finance a project. With no more than $1 million dollars per year in entitlements you cannot plan a project of any consequence at all unless you are able to commit three to five years of your entitlement allocations. In 1978, for instance, we extended our East Runway Complex 2,600 feet, the cost was in excess of $4 million and if we had been unable to multi-year our entitlements the project could not have been constructed.

While on the subject of finance, please let me add that tax exempt bond financing for airport development is crucial to the entire airport industry. It probably is more important to the big airports than to us small airports for they can generate the revenue to pay back the money they borrow. All restrictions should be removed. A parking facility for automobiles is just as necessary as a runway or apron. The fact that we charge for automobile parking has no bearing on the matter—we charge a landing fee and a parking fee for aircraft. In fact The Act requires that we charge fees for the use of the airport to make it as self-supporting as possible. We need tax exempt financing capabilities, no strings or restrictions attached.

Mr. Chairman and Members of the Subcommittee on Aviation, we urge your consideration of the suggestions for improving the present airport and airway legislation. Such will not create any impact on the Trust Fund, certainly nothing like raising the limit for the large airports from $12.5 million to $16 million. And we do not necessarily have any quarrel with the Capacity Discretionary Fund, however, as previously pointed out, this is really not the way to build a railroad. The sooner we define a system of airports to serve the public convenience and necessity, and the criteria for an airport, the better off we will be.

All in all though, this Country has the finest air transportation capability in the world and under deregulation more people are flying to more places than ever before. You are to be commended for periodically reviewing the Airport and Airway Improvement legislation and making it more responsive to our needs. I know you share my desire that we build a system of airports that will not only meet the demands of the public convenience and necessity but also enhance our capability to compete more effectively and efficiently in the world marketplace where the economic battles of this generation are being fought.

STATEMENT OF THE NEW YORK STATE DEPARTMENT OF TRANSPORTATION

INTRODUCTION

The New York State Department of Transportation strongly supports a re-authorization of the airport and airways trust fund programs. However, it also believes that changes from the existing programs should be incorporated in any re-authorization to better meet the needs of the aviation community and the nation.

Based on the Department's review of the Administration's draft bill entitled the "Airport and Airway Enhancement Act of 1987" and the National Association of State Aviation Officials' (NASAO) proposal for an Airport and Airway Improvement Program (1988-1992), we agree with most of the provisions of both proposals. In a ~~few areas ou~~r concerns go beyond what is stated in either proposal.

FEDERAL, STATE AND LOCAL GOVERNMENT PARTNERSHIP

Legislation for the continuation of the Airport and Airway Improvement Program (AIP) should provide for the development and preservation of a balanced system of airports that is responsive to the needs of all sectors of our nation by a partnership of federal, state and local governments. As stated in the NASAO proposal, the States have the primary role to plan and develop their airport systems based upon integrated and coordinated statewide planning covering all other modes of the transportation system.

Local, state and federal governments should act cooperatively to produce a clearly defined and carefuly balanced National Plan of Integrated Airport Systems

(NPIAS). This plan should be based primarily on approved state and regional airport system plans which have incorporated local airport master plans and should be updated continuously as new information becomes available. Furthermore, AIP funding should logically extend to activities beyond the borders of the airport to permit the full potential of the facility to be achieved.

The Federal government should provide a continuing airport planning and development aid program to help finance the recommended development of airports in the NPIAS. The implementation of the plan should continue to be financed at the federal level by aviation system user taxes because of Federal pre-exemption of aviation facility charges and ticket taxes. State and local governments and operating authorities should continue to finance the non-federal share.

LENGTH OF PROGRAM

A two-year re-authorization period being proposed by the Administration is not long enough to implement the new program of Block Grants for small airports and Passenger Facility Charges at larger airports. A five-year period is needed for implementation. A two-year period is simply not adequate for proper planning, adoption of rules and regulations and the achievement of any program goals. If changes are needed during the authorization period, the legislation can be amended when the Aviation Safety Commission has issued its report.

STATE ADMINISTRATION

New York State is in favor of a program of State administration. This is recommended by the Administration, NASAO, the American Association of State Highway and Transportation Officials and the National Governors Association. This proposal has been presented in the past and we believe that the program will assist the states to achieve some of the purposes envisioned in the various acts, past and present. New York State is well situated to administer such a program. Over the years we have been improving and expanding our aviation planning and development capabilities.

We strongly support the concept that Federal assistance for transportation should be apportioned and allocated to the various states on the basis of their demonstrated relative needs. However, in the case of the highway program, in addition to needs, the amount contributed by each state to the Highway Trust Fund is also considered in apportioning the funds. The Federal highway program requires that the percentage of the aggregate amount of Federal-aid highway funds returned to each state in any year must equal at least 85 percent of the percentage of the total trust fund revenues contributed by that State. While we would prefer that airport funds be distributed on the basis of needs, lacking such a needs based apportionment formula, we suggest that the 85 percent minimum concept be considered in connection with the distribution of airport funds. While not directly addressing the needs, such a process will at least ensure that every State will get a reasonable percentage of the funds contributed to the Aviation Trust Fund by their residents. The 85 percent minimum apportionment should be applied to the area/population formula which is proposed by the Administration.

GROUND ACCESS

Groundside improvement projects which are necessary to enhance airport development, and which are clearly related to airport access by air passengers should be eligible for funding. It is proposed to broaden eligibility to include carefully identified projects which improve ground access to airports by making available additional discretionary funds to the airport sponsor or the governmental agency responsible for the development and operation of the ground access to the airport.

TRUST FUND SURPLUS

The Trust Fund is maintained through users' fees. It is incorporated into the Unified Federal Budget which has resulted in program levels being set well below the Trust Fund's income levels. New York State believes that authorization levels should be set to have the Trust Fund's drawn-down rate more closely corresponding to the revenues generated by the user fees.

DEFEDERALIZATION

Primary airports presently receive entitlement funds based upon enplanements. The State supports the Administration's proposal to allow the primary airports to become, at their option, "defederalized" and to permit them to institute a passenger facility charge in lieu of Federal assistance.

PRIVATELY OWNED AIRPORTS

At present, not all of the airports included in the NPIAS are eligible for Trust Fund airport development funding. This policy is inconsistent with the Administration's policy of encouraging privatization of public facilities where efficiencies can be achieved. It is also inconsistent with long-standing procedures in the public transit mode, where private operators have participated in the program since its inception. All airports in the NPIAS, even those privately-owned, should be eligible for airport improvement and development funds from the Trust Fund program. We believe that all airports in the national airport system plan are important to the system and to exclude any is detrimental to the concept of a national system of airports. We recognize that if Trust Fund monies are given to an airport, a guarantee of its continued existence and viability will be secured, at least through the life of any funded improvement. This proposal merits consideration because of the loss of privately-owned, national plan system airports which has been accelerating in recent years.

NOISE

Aircraft noise sometimes creates incentives to constrain the continued growth of an efficient National Airspace System through the imposition of a patchwork of noise restrictions. The Department supports the continuation of a dedicated source of funds to address noise problems as supported by the Administration and NASAO.

Statement of Charles P. Pizzi, Director of Commerce, City of Philadelphia

Mr. Chairman, Members of the Subcommittee: I am Charles Pizzi, the Director of Commerce for the City of Philadelphia. I wish to provide testimony concerning the proposal to reauthorize the Airport Improvement Program, which is scheduled to expire on September 30, 1987.

I. PHILADELPHIA'S AIRPORTS SERVE ONE OF THE NATION'S LARGEST MARKETS AND HAVE HAD A DRAMATIC GROWTH IN TRAFFIC

The subject of this hearing—the future of the Airport Improvement Program—is very important to the two airports for which I am responsible: Philadelphia International and Northeast Philadelphia airports, both of which are owned and operated by the City.

Philadelphia International Airport is a primary airport that serves the entire tri-state area of Pennsylvania, New Jersey and Delaware. Northeast Philadelphia is a reliever airport. Together, they serve an SMSA of about 5.3 million and handled approximately 13 million passengers and 571,000 flight operations in 1986. That places us among the nation's top twenty leading airports in those categories, and I know we would have handled even more but for capacity constraints which we are overcoming.

Philadelphia International is an interesting airport because it is so multi-faceted. Besides its domestic and international air carrier operations, it is also one of the nation's leading commuter hubs. We combine different types of services to optimize our location and passenger travel requirements and have, thus, successfully carved out our niche in the Northeast's and the nation's transportation network.

The City has several major development projects underway at its two airports and several more that we must begin in the near future. These projects are essential to meet the tremendous increase that we have seen in the recent past, and expect to see over the next few years, in the region's demand for more and improved air transportation. We are not alone in this regard. Throughout the country, airport operators are working diligently to build an air transportation system for the 1990s and beyond.

The Philadelphia airports are city owned and operated. They do not have access to substantial sources of alternative funds, such as from a regional port authority having its own revenue sources, to finance major capacity improvement projects. As a result, we and many cities like us absolutely depend on the Airport Improvement Program to help fund these projects. Accordingly, we strongly urge Congress to enact legislation which will reauthorize the AIP as recommended by the joint AOCI/AAAE proposal with which we essentially agree. In particular, we recommend that Congress:

(1) Authorize $1.8 billion in FY 1988 with $100 million increases each year for FY 1989 through FY 1992. This spending level would be achieved by distributing the tax revenues to be collected as well as the existing surplus in the Airport and Airway Trust Fund. Such action would come much closer than the Administration's proposal to providing needed funding levels;

(2) Reauthorize AIP for at least a five-year period—to provide predictability and permit orderly planning;

(3) Include safeguards to ensure that Trust Funds are spent as directed by statute, such as:

A. suspension or reduction of user taxes;

B. an airport option to adopt a passenger facility charge; and

C. taking the Trust Fund off-budget and exempting it from budget cuts under Gramm-Rudman

—so that air transportation designated dollars do not become hostage to budget or other considerations extraneous to air transportation; and

(4) Revise the entitlement formula to reflect air cargo.

II. PHILADELPHIA NEEDS SUBSTANTIAL AIP FUNDS TO MEET THE REGION'S GROWING DEMAND FOR AIR TRANSPORTATION SERVICES

Philadelphia International is in the midst of its first major facilities expansion since the early 1970s. During that period, while the rest of the nation's airport and airways system was growing, Philadelphia remained relatively stable. The airport serves the nation's fourth largest metropolitan area, yet has barely ranked in the top 20 in enplanements. All that is about to change with several major expansion projects which will substantially benefit the travelling public and the nation's air transportation system. To complete these projects, Philadelphia is providing tens of millions of dollars of its own funds. However, we also will need tens of millions of dollars in matching AIP funds.

The City's largest aviation project is the construction of a new International Terminal at Philadelphia International Airport. It will replace a converted hangar that is about 40 years old and must be retired. The new terminal will contain 11 gates, customs and immigration facilities, and have the capacity to handle 500,000 passengers per year by 1990. It includes terminal facilities, aprons, aircraft loading bridges, and related improvements to baggage claim roadways. Design and engineering work is underway, construction will start this year and the project is scheduled for completion in the first quarter of 1989. As evidence of the desperate need for this project and the City's commitment to it, the City has issued revenue bonds to cover about $54 million of the project costs. An additional $6 million of AIP funds have been approved, but an additional $12 million will be required during the next 2 years for the aprons and other AIP eligible components of the project.

The list of other projects at Philadelphia International and Northeast Philadelphia includes many capacity enhancement projects, such as an extensive apron for air cargo operations, several taxiways, extension of a runway safety area, installation of more efficient ventilation equipment throughout our passenger terminals, replacement of the thirty-year-old aprons at the passenger terminals, scheduled repair work for one of our runways, replacement of various pieces of snow removal equipment (several snowfalls this past winter made this painfully evident), access roads, and a new airport vehicle storage building.

Many of these projects must be completed in the next several years simply to maintain existing service, much less expand! Without these projects, service will deteriorate. We cannot let this happen and will do everything we can to keep it from happening, working with you and this subcommittee and our Congressional delegation in the Senate and the House. Other projects at Philadelphia are necessary if we are to meet the growing demand for service. While substantial non-federal funding is being provided for these projects, the City needs federal support through an AIP program where the authorized and available dollars are, in fact, made available.

III. REAUTHORIZATION PROPOSALS

1. AIP should be reauthorized at a $1.8 billion level in FY 1988 with annual $100 million increases to ensure that the current surplus is spent.

Despite the tremendous increase in passenger and cargo traffic during the past few years, the Administration proposes to freeze FY 1988 and FY 1989 AIP funding at the FY 1987 level. The Administration's position here seems particularly shortsighted and inappropriate in view of the Department of Transportation's recent Order which sought to solve capacity problems by reducing service at several major airports, including Philadelphia International. We were one of the few airports that responded in opposition to that Order because we believe air service is important to our citizens. It is also a key to our region's economic well-being because we have found that excellent service at our airports is an important component of corporate decision-making on where to locate. We, thus, feel it is highly counterproductive to interfere with the public's need to travel. The City's position is to provide capacity that meets demand, not to reduce demand to fit inadequate capacity. Mr. Chairman, we submit that the Administration's approach, as reflected in its AIP proposal and the Department of Transportation's Order, is a negative one which ignores the problem. We need an increase in AIP funding, not a freeze at current levels. The existing AIP surplus that has grown so unconscionably provides a readily available source for this increased funding.

During the past five years of the current AIP program, air services grew dramatically and airports throughout the country began having capacity problems. Yet, the AIP was accumulating a $5 billion surplus. The air-travelling public was directly taxed for this money to provide an adequate national air transportation system. Having paid its money, the public did not get what it thought it was buying. Instead, the nation is facing capacity constraints which would certainly not be as acute if these funds had been spent during the past five years. Since it takes years to turn dollars into capacity, we must immediately begin to release these funds if we are to solve the problem.

For these reasons, Mr. Chairman, we strongly urge Congress to reject the Administration's status quo approach and, instead, implement the AOCI and AAAE reauthorization proposal which requires the surplus to be spent over a five-year period. As indicated in the AOCI/AAAE testimony, by spending the surplus and revenues to be collected over the five-year period of a new AIP program, AIP could be authorized at a $1.8 billion level in FY 1988 with $100 million increases in each of the following years. This will bring the program to an annual level of $2.2 billion for FY 1992.

2. Long-term authorization is needed to allow long-term planning by airports.

When Congress considered the re-authorization of AIP in 1982, the City of Philadelphia testified that it preferred a ten-year authorization period, that a five-year period would be acceptable and that the then-proposed two-year period was totally unacceptable. Our position remains the same this time around. We strongly urge Congress to reject a two-year authorization cycle as too short and to reauthorize the program for at least a five-year period.

Philadelphia and, we believe, other airports need long-term funding certainty because the capital construction planning process takes an average of five to six years. As we noted earlier, the City has on the drawing board millions of dollars worth of needed projects that are AIP eligible and require AIP funding. A two-year program does not give the City the necessary assurances that funding will be available as projects move from the planning stage to the construction stage. Since proposed financing availability is critical to any project, a two-year horizon would absolutely destroy the planning cycle. I, personally, see no productive reason whatsoever for such a short program unless program termination is in the wings—and that is something all of us who have to plan would certainly like to know now rather than having it surprise us later.

3. Safeguards to ensure that money in the trust fund is spent for airport projects.

The new AIP should be structured so that the accumulation of taxed but unspent billions will not be repeated. Thus, the City strongly urges that statutory mechanisms recommended in part by you and in the AOCI/AAAE testimony be put in place to ensure that both the current surplus as well as revenues raised under the new program be expended as authorized during the next five years.

First, we fully endorse the approach that aviation user taxes be automatically reduced if the uncommitted Trust Fund surplus exceeds $1 billion dollars in FY 1991 or FY 1992. This will eliminate a tax on the system if the system is not receiving benefits from those taxes.

Second, the federal prohibition of passenger facility charges (PFC) should be automatically repealed if the annual funding level for AIP is less than the authorized level. Airports electing to adopt such a charge must, however, continue to be eligible to participate fully in the AIP program. The charge would be used as a supplementary financing source. The Administration's proposal of permitting an airport to adopt a passenger facility charge only if it dropped out of AIP is unwise and we oppose it for two reasons. First, it is unfair for users at a "defederalized" airport to be paying taxes without receiving any benefits. Second, we need a strong AIP program and I am afraid it will be weakened if airports are allowed to or forced to drop out entirely. Some of us, including Philadelphia, could probably do all right under a PFC, but if other major airports drop out, it will undermine the national scope of the AIP, weaken its political support and, ultimately, weaken the national system. Provided there is adequate funding at the levels I have outlined and those levels are made available throughout the life of the program, I would urge that no one be permitted or forced to drop out except when triggered by inadequate funding.

Third, Philadelphia supports S. 784, which would remove the Trust Fund from the unified federal budget and exempt it from the Gramm-Rudman across-the-board budget cuts. This step will prevent the application of the aviation user tax for completely unrelated purposes. However, we are not in as good a position as you are to judge the likelihood of success of this approach and would only ask that the major budgetary issues that are called into play here not jeopardize the AIP reauthorization process.

4. Revision of the entitlement formula to reflect air cargo.

The present entitlement formula is based on passenger enplanements and does not reflect air cargo transportation. However, airport facilities must accommodate both passenger and cargo operations and the formula for allocating entitlement funds should reflect this fact by including cargo traffic.

IV. CONCLUSION

In summary, the City of Philadelphia strongly supports a five-year reauthorization of the AIP at a $1.8 billion level in FY 1988 rising by $100 million per year to $2.2 billion for FY 1992. The program must ensure the current surplus and tax revenues are spent for their intended purpose of improving the nation's air transportation system. Trigger mechanisms should be enacted to provide this assurance. In this regard, we support a voluntary passenger facility charge as a supplement to, but not in lieu of, AIP funding.

Mr. Chairman, and members of the Committee, I thank you again for this opportunity to present the City's views on this important legislation and would be happy to answer your questions or elaborate on any of our recommendations for the record.

STATEMENT OF HOWARD W. POLLOCK, CHAIRMAN, TRACKING ANALYSIS CORPORATION ("TAC")

Mr. Chairman and other distinguished members of the subcommittee on aviation. It is an honor and privilege to appear before this body today. We thank you for the opportunity. We want to make you aware of an exciting and innovative technology for use in aircraft traffic control and collision avoidance that, hopefully, will stir your imagination. This technology can provide for the first time a single, automatic, totally-independent and self-sufficient surveillance system. No longer will the air traffic controller be compelled to rely upon a beacon radar to monitor position signals transmitted by a transponder aboard an aircraft.

Unfortunately, this technology was not envisioned in the NAS plan, which perhaps was our fault for not sooner bringing it to the attention of the FAA. However, we have since briefed FAA and their scientific advisors, and believe they are now fully aware. We think these individuals now understand and appreciate the value that linc technology can provide in meeting the need to improve the safety and efficiency of our national airspace.

My name is Howard W. Pollock, former Congressman for Alaska, and chairman of the board of Tracking Analysis Corp. ("TAC"), the company that owns the patent on the technology we will be discussing with you. I am also head of the Washington, DC office for the corporation.

With me is Andrew H. Johnson, president of Tracking Analysis Corp. Mr. Johnson has been involved in the airline/air express business for 15 years, and has served as an independent airline industry analyst/advisor/consultant in the industry for the past five years.

Our purpose today is simply to make you aware of the unique and proven state-of-the-art acquisition tracking and pointing technology known as "loop integration control" or "LINC". Permit me to repeat—loop integration control ("LINC"). Remember the term! Thus far, it has been "the *missing* LINC" (if you will kindly excuse the pun), but no more. LINC is an essential ingredient that can serve now to bring into fruition ever so many of both the short- and long-term objectives envisioned by the FAA in the *National Airspace System (NAS)* plan.

The "loop" in "loop integration control" is to define a closed-loop environment that separates the pointing and tracking functions. "Integration", in the title, is to define a method of predicting the vehicle position using a trajectory algorithm to keep the sensor on the target without lag. Its tracking loop adjusts the trajectory using sensor data to quickly and sensitively discover and correct any trajectory change.

LINC is a closed two-loop, double-integration, error-free sensor system that operates in real-time. LINC has many applications on the ground, in the atmosphere, and in space beyond. However, today I want to talk about its application for air traffic control and for collision avoidance.

In volume 2 of the FAA plan for research, engineering and development, it is stated on page 6-2 that "the goal of this activity is to provide a capability to detect, locate precisely, and identify all aircraft in the maneuvering area of an airport." In volume 1 of the plan, on page 3-9, it is stated that "the avionics required to operate in the airspace should be minimized." Mr. Chairman, these are precisely the goals that can be achieved by utilizing LINC technology as part of the NAS plan.

The NAS plan calls for several technological improvements and enhancements to the current system that is based upon position reports provided by the pilot or by avionics on board each aircraft. The LINC technology is a system of objectively and independently verifying the position, velocity, altitude and acceleration, the trajectory of the aircraft, without any communication with the aircraft itself. LINC is the only method of confirming the altitude of the aircraft without reference to the barometric altimeter on board the aircraft.

Let me assure you that, although Tracking Analysis Corp. has this advanced technology for aircraft traffic control and collision avoidance, we are not proposing that the FAA do away with any of its existing equipment or procedures, nor discard any plans now included in the NAS study and projections. Essentially, we are proposing to FAA an independent verification methodology to supplement the existing traffic control and collision avoidance systems.

As you are aware, there is much discussion within the Congress, in the press and public, the airline industry and, of course, the FAA about our Nation's air traffic control and safety record.

Our current air traffic control (ATC) system is a high-technology, high-performance operation with safety as its top priority—and, it is doing a good job; but we know it must be improved substantially to handle the increasing traffic flow. By every measurement, there are more aircraft flying more people and freight to more destinations than ever before. This is expected to continue and, in fact, to increase in the forseeable future.

As I'm sure you know, the National Airspace System (NAS) activity forecast between 1986 and the year 2000 predicts that air carrier hours flown will increase by 55%; the number of air carrier aircraft will increase by 63%; commuter aircraft by 93%; general aviation by 35%; and the helicopter fleet by 77%. Ladies and gentlemen, this is only 13 years away; and the task before the FAA is formidable and monumental.

Today, air traffic control is essentially manual, and that is a serious limitation to growth, efficiency and safety. To effectively automate, it is absolutely necessary to identify aircraft by their trajectory "signature", supplemented with their respective filed flight plans. Using the complete trajectory, instead of position alone, is the innovative technology we propose. Long-term it will be essential. The LINC technology will instantaneously and accurately generate and continuously update these trajectories in real-time.

The ATC system should handle all traffic automatically. This can readily be accomplished if each aircraft is identified by its unique geocentric trajectory, which is then compared with filed flight plans, position reports and search radar data. Each source receives information independently, compares it with each of the others, and alerts the controller when there is a projected problem.

Today, ATC depends largely on a beacon for identification of each aircraft and for its position reports, rather than the unique aircraft trajectory signature, which is a positive identification. All aircraft have unique trajectories, but not all have functioning beacons. It is especially those non-beacon aircraft that degrade safety and endanger lives when the system relies solely on-beacons. The same applies to the IFF "mode c" altitude readout, when the aircraft is not equipped or is giving incorrect altitude information.

But back to the distinguishingly different attributes and capabilities of LINC. LINC can best be described as a precision tracking and pointing technology capable of achieving microradian accuracies hitherto unavailable. LINC separates the tracking and pointing bandwidths in the sensors to provide noise-free data in the servos, so as to provide trajectories of exceptional accuracy on crafts both in the atmosphere and in space in real-time.

LINC is unique in a number of ways. One is that it points to the target using a trajectory description that has been corrected by filtered sensor data.

In fractions of a second, LINC can update the state vector (time, position, velocity (speed and direction) and acceleration) of a dynamic target, such as an aircraft, so that the sensor is always pointing precisely at the aircraft as it proceeds along its determined trajectory.

When implemented in a mechanical-angle tracker, LINC is an incredibly-fast maneuver-detector; can provide extremely accurate trajectories in milliseconds; can track aircraft at very low signal-to-noise ratio; is relatively immune to jamming; is self-calibrating and self-validating; has the capacity to network large numbers of sensors into a single command and control mode; and, surprisingly, the accuracy of LINC is independent of its sensor beamwidth.

When we use the term "trajectory", which is the product of LINC, we are referring to a complete and accurate trajectory that includes, not only the position of the aircraft at different instances in time, but the first derivative of these factors, the velocity term, and the second and highest derivative, the acceleration term as well. There can be only one trajectory for each aircraft, a universal "signature" that will distinguish it from all other aircraft; and, because of their microradian accuracy, all LINC sensors/radars consistently will produce identical trajectories for any given aircraft.

LINC uses the actual trajectory of the aircraft to identify, track and control its movement; and this technology can network large numbers of both active and passive sensors in its control system simultaneously, keeping control of each aircraft in a sector or a combination of sectors from take-off to landing, in consonance with the filed flight plans. This networking is another unique feature of LINC; with it all ATC radars could be integrated into a single error-free network.

Another very important point to emphasize—LINC will work by tracking the skin of each and all aircraft in the control sector, irrespective of whether or not the aircraft IFF is operating properly to provide identification and altitude information. Thus, for the very first time, the surveillance, control and collision-avoidance procedures can utilize a sophisticated technology totally independent of the aircraft.

Because LINC can provide instantaneous, complete and accurate trajectories in real-time in milliseconds that are consistent and reliable, and can network large numbers of sensors into its control system simultaneously, it now can accomplish many of the present and future objectives of the FAA, as stated in the NAS plan.

Mr. Chairman, we have carefully reviewed the 57 projects that are identified in the FAA RE&D plan, dated August 1986, and find that more than 60% of them require accurate and precise operational information regarding the changing positions or trajectories of dynamic targets—aircraft in motion. Unfortunately, time will not allow me to discuss any of the wide-ranging FAA objectives in the plan. However, I can assure you that the microradian accuracy of LINC in real-time, and the networking capability of the technology, would indicate that LINC is indispensable to the success of any expanding air traffic control system—simply because no other tracking and pointing system in existence today has the characteristics to accomplish the myriad tasks with the speed and accuracy demanded.

We are convinced that the LINC technology can help achieve many of the project goals of the NAS plan earlier, can reduce cost, and substantially increase efficiency. Unfortunately, as I stated previously, the NAS plan did not envision utilization of the LINC technology; and, as I stated earlier, that probably is our fault for not bringing LINC to the attention of the FAA sooner. Nevertheless, it is our considered opinion, that LINC can vitally affect the ultimate result—a safer, automated air traffic control system that can handle the rapidly-growing needs of the aviation industry and, at the same time, significantly reduce controller workload and stress.

Mr. Chairman, if you surmise that I am enthusiastic about LINC, permit me to say that you are "right on target". The exciting truth is that LINC has the capability of revolutionizing acquisition tracking and pointing control in all its various applications on the terrestrial firmament, in the atmosphere, and in space. We are proud indeed that it is a patented American technology.

We believe that LINC is fundamental to the increased safety, capacity and efficiency that the congress, the FAA, the airlines, the travelling public and all users of the national airspace demand of air traffic control.

We, of Tracking Analysis Corp., envision a multiphased project to substantially upgrade aircraft traffic control and collision avoidance in the coming years of much denser aviation traffic. We need to get started now if such a LINC upgrade is to be completed and operational by the end of this century, only 13 years hence.

Over the long term, it will involve a considerable expenditure of funds; however, the expense is negligible when weighed in terms of accuracy, efficiency and safety. The present system needs to be upgraded, improved and brought into the twenty-first century. That, of course, is the purpose of the NAS plan and of these hearings.

We believe the NAS plan must be amended to include some element of objective verification of the true trajectory of each aircraft in flight in the national airspace. The present system is labor-intensive and stressful. The objective verification of LINC can provide for both pilot and traffic controller an observable confirmation of the trajectory, and can reduce workload, stress and fatigue, while substantially increasing safety.

It occurs to us that perhaps the system upgrade with LINC should be separately funded by FAA as a primary project; but, of course, that is an internal governmental decision for FAA, the administration, and the Congress to make collectively.

Again, I want to emphasize that we are not asking for funding today, but wanted to make you aware of this significant technology. TAC will be submitting two unsolicited proposals to FAA shortly for certain aspects of air traffic control. The first proposal is to develop a prototype LINC-assisted system to significantly reduce traffic separation and increase air safety in terminal areas at our major airports by providing independent, error-free, real-time surveillance of all traffic in the terminal area. The second important proposal is to provide LINC technology applications to the very crucial, final approach, missed approach, and departure phases of terminal control. In the near term, we hope to develop a LINC universal standard against which all other tracking and pointing systems can be compared, measured, evaluated, calibrated, verified and certified.

Thank you, Mr. Chairman, and members of the committee. We are excited about the potential of this innovative technology as the answer to FAA for instantaneous, accurate trajectory determination for many aircraft in a congested control area, monitoring all traffic simultaneously. We hope you are equally enthusiastic.

That concludes my remarks.

Department of Aviation,
March 6, 1987.

Hon. Wendell Ford,
Chairman, Senate Aviation Subcommittee, U.S. Senate, Washington, DC.

Dear Senator Ford: Recently a great deal of criticism from the National Transportation Safety Board has been directed toward the FAA's O'Hare Air Traffic Control Tower and Aurora Center. These criticisms, when coupled with the high level of publicity given to numerous alledged near misses, have created an environment where public perception of air safety in the Chicago area is eroding.

As operator of the world's busiest airport, the City of Chicago is compelled to focused on air traffic safety as a central guidepost in both our operation and development of Chicago's airports. I have full confidence that O'Hare Air Traffic Control Personnel are working diligently to maintain the highest level of safety for the flying public and are performing superiorly under adverse conditions and publicity. They have and will continue to have our full support and cooperation. However, I am aware that staffing problems exist within the FAA's the O'Hare Air Traffic Control Tower and the Aurora Center, problems which are further aggrevated by outdated computer equipment, some of which I am told date back to the 1950's and radios to the 1940's.

Air traffic safety must constitute the major agenda item of the Senate Aviation Subcommittee as you consider the reauthorization bill for the Airports and Airways Improvement Program. I have reviewed some of the proposals which have been suggested. It is essential that monies collected from airline ticket sales and aviation fuel taxes be allocated and spent to resolve matters of airport safety, fuel airport noise, airport capacity and the elimination of delays.

We must urge Congress to immediately spend a portion of the over $8 billion surplus in the Aviation Trust Fund for modernizing air traffic control equipment and hiring and training additional personnel. Unfortunately, efforts to balance the budget have enjoyed a higher priority than critical programs for air safety and air safety research and development.

It is imperative that the Aviation Trust Funds be removed of the from the unified federal budget and exempted from budgetory limitations if we are to correct this imbalance in priorities. In addition, a full funding trigger mechanism should be enacted wherein the current Federal prohibition on passenger facility charges would be automatically repealed if in any year the Airport improvement funding level is less than the authorized level. Further a Trust Fund surplus trigger mechanism should reduce or suspend user taxes if the uncommitted Trust Funds exceed $1 billion in any FY after 1990 or 1991.

The City of Chicago joins with the Airport Operations Council International and the America Association of Airport Executives in requesting that the Facilities and

Equipment Program be funded at $1.5 billion per year. We trust that high priority will be given to Chicago in initiating an air traffic control system modernization program. Chicago's airports are re-building today to insure that we are capable of accomodating more aviation activity in the future. Toward this end, Chicago O'Hare International Airport is undergoing a $1.5 billion modernization program of its Airfield terminals and Airport facilities. However, without a substantial federal appropriation of funds for air traffic safety, serious questions are and will continue to be raised about the FAA's ability to meet the demand that our airports can easily physically and logistically accomodate.

On behalf of the City and citizens of Chicago, I urge the Senate Aviation Subcommittee to enact legislation which provides the level of spending, authorization, and protection necessary to fully develop and operate the greatest air transportation network in the world and restore public confidence of safety in the skies.

If I can be of any assistance during your legislative process, please do not hesitate to contact me.

Sincerely,

EARL F. HORD, *Acting Commissioner.*

U.S. SENATE,
Washington, DC, March 20, 1987.

Hon. WENDELL H. FORD,
Chairman, Subcommittee on Aviation, Washington, DC.

DEAR MR. CHAIRMAN: As the time approaches for a consideration of the reauthorization of the Airport and Airways Improvement Trust Fund, this is to strongly urge that it be removed from the unified budget and restored to its rightful status as an independent account.

The history of the Fund is clear. The Congress intended to establish a pool from which to fund the maintenance and development of an air transportation system second to none. Drawn from special taxes on airplane fuel, airline ticket purchases, and other related user fees, the Fund has grown to some $4.5 billion, a size which would make the goal of a safe and technologically efficient system possible. Instead, by considering the Fund as part of the unified budget, appropriations for airport and airways development have become merely expenses which Congress must trim.

I believe it is foolhardy for the Congress to continue the practice of disguising the extent of the federal deficit by counting the Fund against it. Our airways transportation system already shows unmistakable signs of deterioration. Our airports and skyways are overcrowded and increasingly unsafe, the air traffic controller force is inadequate and overstressed, and the installation of otherwise available safety devices lags.

We are years behind in airport and airways improvement. The former Administrator of the Federal Aviation Administration, Admiral Donald Engen, stated that his frustration over the funding situation was primarily responsible for his recent resignation. I find the resignation itself a dangerous symptom of the impaired morale of those working with our air transportation problems, one of the signals that a serious approach to funding remedies is overdue.

I feel that the restoration of the original purpose and accessibility of the Airport and Airways Improvement Trust Fund will go a long way toward enabling this nation to reverse the downward trend in the health and safety of our air transportation system. I will appreciate your Subcommittee according careful consideration to these matters in the upcoming reauthorization proceedings.

Thank you for your courtesy and assistance.

Sincerely,

JIM SASSER, *U.S. Senator.*

METROPOLITAN NASHVILLE AIRPORT AUTHORITY,
Nashville, TN, March 23, 1987.

Hon. WENDELL H. FORD,
U.S. Senate, Washington, DC.

DEAR SENATOR FORD: Perhaps the greatest challenge facing the nation's airports is how to handle the significant increase in air passenger traffic that has resulted from airline deregulation. The fact that more Americans than ever are traveling by air at lower prices is testimony to the wisdom of deregulation. But this increase in passengers has also presented problems for the nation's air transport system, as well as frustration of increased delays and heightened concerns over safety.

Obviously, there is no panacea for meeting the challenges posed by deregulation. Better management and more personnel are essential. But, most of all, the national system needs to increase its capacity to handle additional air traffic.

Our experience at Nashville is typical. The recent designation of Nashville as a hub by American Airlines has triggered a major increase in traffic at Nashville that will continue ~~into~~ the future. Since April 14, 1986, 202 flights a day have been added at Nashville, an 82.8 percent increase. Over the next three years, flights are projected to increase another 50 percent. This increase in traffic will require a 150 percent increase in gates at the Nashville Airport.

In response to this increase in traffic, Nashville has embarked on a major construction program. This expansion consists principally of a new terminal and a new runway. This construction, in conjunction with the existing runways, will allow us to accommodate the surge in air traffic. This fall, we will open the new terminal. We also hope to initiate construction of the new runway in August of this year. Over $125 million in non-federal funds and approximately $50 million in federal funds will eventually be spent on the project.

Our experience with this major construction effort has highlighted two deficiencies in the current Airport Improvement Program. The first is that the federal financial commitment is inadequate to the task of rapidly expanding the nation's air traffic system. Because this subject has been the focus of a great deal of discussion, including your committee's ongoing hearings, I will not belabor the point other than to say that additional funds are desperately needed.

Our second point, however, has received less attention. This is the mismatch in the timing between the expenditure of funds and the receipt of federal funds during the course of an airport construction project. Expenditures are made in surges, particularly when concrete is poured. Funds are received annually according to funding formulas. This mismatch between expenditures and receipts can cause the type of problem we are facing at Nashville.

To date, our construction program has been ahead of schedule and under cost. But in the next 18 months, we will need approximately $40 million dollars in federal funds to complete the new runway. We recognize that there is simply no combination of federal funding formulas and good luck that will provide us adequate federal funds to complete the runway on time. Accordingly, we are faced with the unwelcome choice of scaling back the project, which is unacceptable in light of our capacity needs, or stretching out the construction program to accommodate the flow of federal funds which, in turn, will lead to delays and major cost overruns.

There is, however, a third option: reimbursement. Specifically, Nashville believes the federal program should be amended so that individual airports can spend their own funds to keep their construction program on time and within budget, and to be reimbursed later by the federal government for the federal share of the construction. We believe such an amendment is not only in the best American tradition of local self-reliance, but also would allow for the most efficient use of federal funds to expand the capacity of the national air transportation system. Speaking on behalf of the Nashville airport, we stand ready to commit our own resources under a reimbursement program to keep the construction program on track.

Fortunately, the idea of reimbursable construction appears to be gaining favor. Section 112(b) of the Administration's proposed amendments provides for reimbursement. The joint proposal of the Airport Operators Council International and the American Association of Airport Executives has also endorsed the concept of reimbursement. On the Senate side, Senator Chiles has introduced S. 710, which includes a reimbursement provision.

In closing, we would urge you in the strongest possible terms to include a reimbursement provision in your forthcoming legislation. Our experience has highlighted it as an essential component in providing a financing structure for the needed expansion of the nation's airway system.

Sincerely,

WILLIAM G. MOORE, JR., *President.*

STATE OF ALASKA
Juneau, April 6, 1987.

Hon. WENDELL H. FORD,
Chairman, Senate Subcommittee on Aviation, Washington, DC.

DEAR MR. CHAIRMAN: The State of Alaska appreciates the opportunity to provide comments on proposals to reauthorize the Airport and Airway Trust Fund. More than any other state, Alaska is dependent on aviation because of its size, location, and limited availability of alternate means of transportation. About seventy percent of Alaska's cities and villages rely on air transportation as the only means of access to the national transportation system. Highway transportation within Alaska is primarily limited to a few roads connecting major cities in the southcentral region of the State.

Alaska contains about 1,000 airports, of which approximately 300 are owned and operated by the State and serve as the primary access to communities. The National Plan of Integrated Airport Systems (NPIAS) indicates that Alaska contains about eight percent of all NPIAS airports in the country. Alaska ranks first among the states in numbers of pilots per capita, aircraft per capita, and airports per capita. Alaskans view air transportation in the same way most other Americans view automobile travel.

Alaska's network of airports must be developed and maintained if Alaska's communities are to survive. The State of Alaska funds almost all of the operations and maintenance expenses for its airports and depends on the Federal government to assist in meeting the airports' capital improvement needs. It is crucial to Alaska that re-authorization of the Federal airport improvement program provide for the State's singular dependence on air transportation. Alaska's annual obligation of general fund monies for aviation (approximately $25 million in FY '86) should serve to illustrate the State's commitment to aviation and airports in Alaska.

STATE ADMINISTRATION

The State of Alaska fully supports proposals to implement a program whereby states could assume responsibility for FAA's administration of Federal airport funds for non-hub airports, thereby allowing FAA airport staff to concentrate limited staff resources on safety issues. Alaska, as owner and operator of ninety-five percent of the Alaskan airports eligible for Federal funds, has the experience and expertise to administer this program. We have administered state funded airport capital improvement programs since statehood in 1959.

We strongly urge that the state administration program provide states with maximum flexibility to determine airport priorities based on an approved comprehensive planning process. Programs initiated by each state can target airport funding to the areas of greatest need. Most states have already developed statewide aviation system plans and have close working relationships with other airport owners and operators. Currently the State of Alaska is not always able to spend AIP funds on its highest priorities because of funding category limits. This would be corrected by a properly structured program for state administration.

FUNDING FORMULA

Under the allocation formulas of the Airport Improvement Program (AIP), authorized in 1982, the total annual apportionment to Alaska appears to be adequate. However, the funding is distributed in five different categories, and DOT/FAA has made an extremely restrictive interpretation on which airports can be eligible for which monies. As a result, the State of Alaska is often unable to spend AIP funds on the highest priority airport needs identified in the Alaska Aviation System Plan.

The Alaska Supplement language, while guaranteeing funds to named airports, limits commercial service airports to a maximum of $473,802 from the commercial service monies—the balance of a project cost must come from limited discretionary monies. In addition, while Alaska receives a sizeable apportionment of area/population funds, DOT/FAA considers many of the general aviation airports to be "named" in the Alaska Supplement language and therefore prohibits these airports from utilizing area/population monies.

Alaska has many airports operating with deficient facilities. In the NPIAS, FAA identified Alaska aviation needs of $570 million between 1984 and 1993. In the last four years, Alaska airport improvements totalled approximately $105 million, leaving a balance of $465 million in airport needs unaddressed. Because of the significant need for improved facilities, and because of Alaska's unique dependence on air transportation, the funding allocation formulas in the upcoming legislation will be of major interest to us. We support the following general provisions:

1. Continuing the present entitlement formula for primary airports with per passenger allotments escalating annually and a new entitlement factor for air cargo (discussed in more detail below).
2. A nationwide set-aside for small commercial service airports.
3. Continuing funding for general aviation airports based on a 50:50 area/population formula as in the existing AIP legislation.

4. A set-aside for Alaska non-primary airports in recognition of the State's unique needs in aviation.

5. Retaining the current 93.75% federal funding participation on eligible project costs.

TRUST FUND PURPOSES

Alaska supports financing modest increases in FAA's operation and maintenance expenses from the trust fund, provided that the level of operation and maintenance funding is tied to increased funding for the airport improvement program. There should also be a specified clause in the reauthorization to ensure that interest accumulated by the trust fund is used for legitimate airport and airway expenses.

REMOVAL OF TRUST FUND FROM UNIFIED BUDGET

The State of Alaska supports removing the trust fund from the Unified Federal Budget. National aviation system deficiencies are increasing while the trust fund surplus continues to grow. The trust fund should not be used to reduce the budget deficit. Users should be guaranteed that their user fees are allocated and used in a timely manner to satisfy the aviation needs for which the taxes were levied.

ENTITLEMENTS BASED ON CARGO TRAFFIC

The State of Alaska supports the proposal to revise the entitlement formula for primary airports to include cargo traffic. Air cargo is of increasing economic importance to the nation's airports. Alaska, particularly because of its geographic separation from the rest of the United States and its placement as a convenient stopping-off point between Europe and the Orient, transports growing amount of domestic and international cargo through its airports. Cargo transportation creates needs for airport improvements that are as important as airport needs generated by passenger transportation.

OTHER PROPOSALS

The State of Alaska supports other proposed improvements to the AIP program that have less of an impact on Alaskan transportation but are nonetheless needed for the nation's air transportation system. Some of these proposals include:

Special dedicated funds for noise, airport capacity, state airport system planning and a revolving loan fund for land acquisition.

Expansion of project eligibility for certain maintenance and groundside improvement projects.

Consolidation, clarification and streamlining of grant assurances.

Alaska is dependent on an effective program to provide funding for capital improvements at its many airports, particularly to service Alaska's smaller communities.

Thank you again for this opportunity to comment on legislative proposals to reauthorize the airport and airway trust fund programs.

Sincerely,

STEVE COWPER, *Governor.*

AIR TRAFFIC CONTROL ASSOCIATION, INC.

Hon. WENDELL H. FORD,
Chairman, Subcommittee on Aviation, Washington, DC.

DEAR SENATOR FORD: The Air Traffic Control Association, Inc. is a professional association of thirty years standing which has as its goal advancements in the science and profession of air traffic control and aviation safety. ATCA's membership consists of air traffic controllers, maintenance technicians, managers, pilots, corporations, and organizations engaged in development, maintenance and use of our National Airspace System.

ATCA hereby submits for the record of hearings the Subcommittee is conducting on April 7-8, 1987, its views on the Administration's proposed reauthorization legislation, the "Airport and Airway Enhancement Act of 1987" (S. 586).

ATCA applauds the Subcommittee's effort to proceed rapidly with reauthorization of our Nation's airport and airway programs before expiration of current law, the Airport and Airway Improvement Act of 1982. However, ATCA urges the Subcommittee to devise and approve legislation of five years duration, rather than the two-year bill proposed by the Department of Transportation. Long-range financial planning is essential for grant applicants in the Airport Improvement Program, to keep NAS Plan projects proceeding on schedule, and to attract and maintain the best of industry's support and participation. If adjustments to any programs become necessary, either as a result of experience or in response to recommendations of the Aviation Safety Commission, Congress can amend the reauthorizing legislation.

ATCA recommends the following funding levels for FAA capital improvement and airport improvement programs:

For FAA Facilities and Equipment, ATCA recommends $1.6 billion in Fiscal Years 1988 and 1989; $1.5 billion in FY 90; and $1.4 billion in FY 91 and 92. These amounts are in keeping with FAA's own 1986 revised projections of financial need, in order to keep the NAS Plan on schedule. In particular, ATCA urges Congress to authorize sufficient funding to permit FAA to return to full-funding of those essential projects, including NEXRAD, which have been forced into year-by-year appropriations.

For FAA Research, Engineering and Development, ATCA recommends at least $200–225 million per year for the next five years. This is the minimum amount required to assure consistent NAS planning, and to assure timely availability of products necessary to maximize productivity associated with completion of the NAS Plan. Generally speaking, RE&D funding is allocated approximately 40% to projects which directly support the NAS Plan; 12% to regulation and safety improvements; 5% to necessary improvements to NAS systems over time ("sustaining engineering"); 40% to NAS Plan enhancements, eg. AERA 3 and the Advanced Traffic Management System; and 3% to advanced concepts, eg. satellite technology and study/analysis. Since the first three categories of RE&D functions are critical to daily operations and NAS Plan progress, any substantial reduction in RE&D funding will cause interruption in research and development of NAS Plan enhancements. These funds, however, are particularly critical, because it is precisely those technological developments which have the greatest capability to increase capacity in the ATC system. ATCA endorses the joint view of the Airport Operators Council International/American Association of Airport Executives that $25 of the $200–$225 recommended for RE&D be earmarked for airport capacity research and development.

For the Airports Improvement Program, at least $1.8 billion per year in FY 88–93. With over $24 billion of AIP-eligible projects identified in the National Plan of Integrated Airports Systems ("NPIAS") for the period 1986–1995, and more than $3 billion in unfunded grant applications outstanding, it is clear that opportunities for improvements to the NAS are going unrealized at current—and proposed—funding levels of $1 billion per year. ATCA therefore endorses the AIP funding level being recommended jointly by the American Association of Airport Executives/Airport Operators Council International.

ATCA recommends that the airport and airways reauthorization legislation include a provision such as that contained in H.R. 8 or S. 784, removing the Airport and Airway Trust Fund off the Unified Federal Budget. Although funding for FAA capital improvement programs and projects will continue to be subject to Congressional oversight in the annual appropriations process, moving the Trust Fund off budget would encourage spending by eliminating the incentive to let Trust Fund balances mount up in order to artificially diminish the appearance of the federal deficit.

ATCA recommends that the airport and airways reauthorization legislation retain the "penalty clause" in current law, which diminishes the allowable Trust Fund contribution to FAA's operations account if Trust Fund expenditures for capital improvements fall below authorized levels. Low level appropriations to FAA capital improvement accounts during the past five years—to the point of forcing FAA to remove some projects from full-funding—clearly indicate that some mechanism is required to encourage spending from the Trust Fund. To ATCA's knowledge no more effective device than the current one has been suggested. Moreover, it is far from clear that the current system has been ineffective. It is possible that even fewer Trust Fund dollars would have been appropriated for capital improvements over the past five years, had the penalty clause not existed.

ATCA does not, on the other hand, recommend adoption of a trigger mechanism to suspend collection of ticket/waybill and fuel taxes when Trust Fund balances exceed a specified level. A trigger mechanism would not necessarily encourage capital improvement expenditures, and if activated, could have the disasterous consequence of causing a deficit in the Fund in the year subsequent. This could result in a drastic delay, or even interruption in FAA capital improvement projects—a result to be avoided at all costs.

ATCA opposes that aspect of the Administration's proposal which would increase the permissible percentage of total FAA expenditures which could be recovered from the Trust Fund to eighty-five (85) percent. This percentage is based upon the assumption that direct users of the NAS should pay all costs of the system except for the fifteen (15) percent directly attributable to military and public aircraft usage. Such reasoning presumes that direct users are the sole beneficiaries of our National Airspace System. The entire American population, however—even those individuals who never actually themselves fly or ship by air—desire and benefit from availability of the National Airspace System to accommodate their needs. Certainly the general fund should continue to contribute substantially toward maintenance and improvement of the airways which are so essential to the commerce, defense and general welfare of our society as a whole.

With regard to the Airport Improvement Program, ATCA respectfully urges Congress to elaborate somewhat upon the Administration's salutary proposal to formulate an airport report on "operating characteristics and future needs of the national system of airports." Although obvious planning benefits can be derived from a well documented report setting performance specifications for the NAS, care must be taken that the report not become an opportunity to eviscerate the compendium of those airport improvement opportunities now in the National Plan of Integrated Airport Systems ("NPIAS"). ATCA therefore recommends that, if Congress decides to adopt the Department's proposal, the reauthorization legislation specify that those projects already identified in the NPIAS be included in, and form a basis for, the report.

ATCA does not favor that aspect of the Administration's reauthorization proposal which proposes voluntary defederalization of airports—that is, voluntary withdrawal from eligibility for airport improvement grant funds in exchange for the opportunity to impose a "passenger facility charge" upon those using the airport. The integrated, coast-to-coast network of airports and airways which exists today facilitates efficiency through federal planning and coordination of airport improvement resources, and convenience for the passenger through national uniformity in airline ticketing and interlining. ATCA fears that voluntary defederalization jeopardizes and detracts from our common goal of maintaining and enhancing the National air transport system, by opening the door to Balkanization. Moreover, although the Administration's proposal to permit airport sponsors to withdraw from the federal grant program would not relieve airlines, passengers and shippers using that facility from payment of those ticket/waybill and aircraft fuel taxes which fund the Airport and Airway Trust Fund, ATCA fears that exemption from federal user fees eventually will be requested by those airports which do defederalize. Since the Trust Fund pays for capital improvements to the NAS, users operating through a defederalized airport rightfully should continue to contribute to the Trust Fund.

The Administration's proposal to permit the states to administer block grants of AIP funds gives due recognition to the capability and willingness of many states to assume an active role with FAA in support of aviation programs. For the reasons stated above in connection with defederalization, however, ATCA does not support state block grants of AIP funding. ATCA believes that airport planning on the federal level best promotes efficiency and economy in the National air transport system.

In closing, ATCA urges the Subcommittee to assure that FAA has available to it funding authorization, and appropriations sufficient to get on with the business of completing the NAS Plan. Today, more than ever, technologies are being made available for upgrading our National Airspace System to cope with tremendous and ever increasing demands placed upon it. FAA's National Airspace System Plan provides a sound opportunity for systematic improvement. Daily the NAS Plan is being subjected to reevaluation and potentially killing scrutiny. Will we dissect and examine modernization programs until funding becomes exhausted or diverted to other needs, without realizing the true potential of our ATC system? Delay and indecision can have that result. This would be a sad, but conceivable conclusion.

Automation is our future. It is overdue. It can provide new capacity. It is the essence of productivity. No one questions that delays plague our ATC system, particularly at peak hours at our busiest airports and in bad weather. Often the current size of our controller workforce is erroneously blamed for delays, when the real culprit is too much traffic for an outdated ATC system and inadequate groundside facilities. Let us recognize that our controller workforce is doing the best possible job with an overworked, aging, largely manual system, which at times cannot cope with the demands of today's air transportation marketplace. We need to get on with NAS modernization, and provide our controllers with the best tools that today's technology has to offer.

Thank you for the opportunity to present these views. ATCA looks forward to working with the Subcommittee in pursuit of our mutual goal of enhancing safety and efficiency in our National Airspace System.

Sincerely,

GABRIEL A. HARTL, *President.*

DALLAS/FORT WORTH INTERNATIONAL AIRPORT,
April 16, 1987.

Hon. WENDELL H. FORD,
Chairman, Senate Subcommitte on Aviation, Washington, DC.

THE HONORABLE WENDELL H. FORD: The Department of Transportation's proposed budget for Fiscal Year 1988 calls for thirty-eight planning positions to be eliminated in the Federal Aviation Administration's Airport's Division. The Office of Management and Budget has concluded that these positions will not be necessary because the FAA's State Block Grant proposal and Defederalization Option will lessen the FAA's workload. Such a conclusion and recommendation concerns me for several reasons.

Planners in the Airport's Division are involved in much more than processing airport grants. These employees work with airports to provide input on projects, evaluate the feasibility of proposals, and ensure the AIP funds are properly administered. If the FAA is seeking to increase airport capacity in order to reduce airport delays and congestion, it is not practical to expand the grant program and then reduce the size of the staff. It is not guaranteed the State Block Grant proposal will be adopted by the Congress and, under the present budget proposal, the thirty-eight positions will be eliminated even if the legislation is not passed.

The FAA has contributed millions of dollars towards the development of Dallas-Fort Worth International Airport. For over twenty years, the FAA Southwest Regional Office has been intimately involved with the planning and construction of this Airport, providing knowledge, expertise and funding. Elimination of any of FAA's positions would be detrimental not only to DFW, but to the hundreds of other airports assisted by the FAA.

On behalf of the Dallas-Fort Worth International Airport, I would appreciate your consideration of these issues when the Fiscal Year 1988 proposed budget is reviewed.

Yours very truly,

ORIS W. DUNHAM, JR., *Executive Director.*

OFFICE OF THE GOVERNOR,
Boise, April 20, 1987.

Hon. WENDELL H. FORD,
Chairman, Senate Aviation Subcommittee, Washington, DC.

DEAR MR. FORD: The Denver-Stapleton Airport has historically been a major destination and connecting hub for Idaho citizens and businesses. I foresee this importance growing in the near future.

Air transportation is vital to Idaho's economy. While AMTRAK and Interstate bus service remains important, it is the airlines that provide the majority of our interstate public transportation services.

I encourage all efforts to cause Denver to continue its vital role as the major connecting hub in the intermountain west.

Sincerely,

CECIL D. ANDRUS, *Governor.*

NATIONAL AIR TRANSPORTATION ASSOCIATION,
Alexandria VA, April 20, 1987.

Hon. WENDELL FORD,
Chairman, Aviation Subcommittee, Washington, DC.

DEAR SENATOR FORD: The National Air Transportation Association represents the business interests of fixed base and air taxi operators at over 1200 locations throughout the United States. As such, we appreciate this opportunity to present our views for the record on the reauthorization of the Airport and Airway Trust Fund.

Fixed Base Operators, or FBOs as they are known, are perhaps the most complicated type of business in aviation today. Most FBOs are involved in a variety of aeronautical activities: sale of aviation fuel to private and business aircraft; airline refueling; aircraft parking and hangaring; and aircraft charter to name just a few. Even though most of our Members provide all of these services, the major profit centers for virtually all fixed base operators are the sale of aviation gasoline and jet fuel, maintenance, and the chartering of their aircraft.

FBOs and air taxis are located on airports all across the country—from the smallest general aviation field to the largest air carrier airport. Typically, more than one FBO is located on each field. Even in those cases where only one operator is located at an airport, that operator, because of the highly mobile nature of his customers, experiences competition from FBOs at other fields. A study of competition in the FBO industry, commissioned by NATA in 1978, revealed that, on average, an FBO selling fuel experiences competition from eleven other fuel sales operations within a 50 mile radius. Within 100 miles, the average FBO experiences competition from 24 other operators. We have no reason to believe the situation has changed in recent years.

We are aware that some aviation consumers feel additional competition among FBOs would be healthy for the general aviation industry. If it is your desire, NATA will be pleased to provide additional quantitative data to help you make an informed decision on this matter.

FBOs and air taxis are not only concerned about airport and airway development from a philosophical standpoint, they are an integral part of the process, since they act as collection agents for the U.S. government. Each time an FBO sells a gallon of avgas or jet fuel, it is required by law to collect the federal aviation exicse tax on that sale. Each time an air taxi provides its aircraft to a charter customer, that air taxi must collect the federal passenger ticket tax. Of course, these taxes are deposited in the Aviation Trust Fund for use in airport and airspace development.

The Subcommittee should understand the very unique position that fixed base and air taxi operators occupy with regard to airport and airway reauthorization. Since these companies are so geographically diverse, they are concerned with development at all airports, not just general aviation fields and not just air carrier airports. Since one of their major sources of revenues is from fueling all types of aircraft—private, business and airline—they are very aware and supportive of the interests of those segments of aviation. Since air taxis operate in the entire airspace system, they are vitally concerned with all aspects of its development.

As much as any other segment of aviation, fixed base and air taxi operators are concerned about total aviation system development. Not just large airports. Not just small airports. Not just Terminal Control Areas or unrestricted airspace, but the entire aviation system.

This, coupled with the fact that FBOs and air taxis serve virtually all segments of the aviation industry, requires NATA to look at reauthorization from the macro sense. We encourage you and the Subcommittee to seriously consider the specific issues raised by other witnesses concerning airport development and improvement. Likewise, we are intentionally leaving specific, technical discussions about the National Airspace System Plan to those witnesses with expertise in that area.

Instead, NATA will limit its remarks to our Members' overall concerns about airport and airways funding.

In early 1982, when the Subcommittee was contemplating the last reauthorization of this program, NATA expressed, for the record, a number of concerns. Primary among them was a growing surplus in the Aviation Trust Fund and the Administration's efforts to use the Trust Fund to pay for more of the Federal Aviation Administration's operations and maintenance budget.

In spite of those concerns, NATA Members reluctantly agreed to support an increase in aviation fees because of the repeatedly offered assurances that the Trust Fund would actually be spent for capital improvement and not held "hostage" to help balance the nation's budget.

Of course history has shown us that the Administration was unable and/or unwilling to fulfill its commitments to Congress and aviation users. While we don't want to dwell in the past, we feel it is important for the Subcommittee to understand the way in which the Administration's betrayal of trust has affected NATA Members' attitude toward the current reauthorization process. For that reason, we have included with this statement a reprint of an article entitled "How the Reagan Administration Betrayed Aviation" that was published in NATA's monthly newsletter in 1983. It is easy to see how many NATA Members' attitude is simply "I told you so," or "Let's not let this happen again."

Nevertheless, fixed base and air taxi operators are still committed to modernization of our nation's airports and airways. They simply want more concrete assurances that their tax dollars will be spent for capital development.

In general, our Members are concerned about program slippages in the NAS Plan. It is confusing to hear Administration officials say that delays in implementation are because of contractual and technological problems and not because of funding shortfalls. If that is the case, NATA encourages the Subcommittee to carefully scrutinize FAA's management practices to ensure that future problems are avoided.

Because NATA Members span the spectrum of airports, we encourage continued development of the entire national airport system. We are concerned, however, that development priorities are not changed. For example, groundside congestion at some airports has certainly exacerbated the capacity problem, and should be addressed in a federal improvement program, but airside constraints must be given priority.

We can see no benefit accruing from airport defederalization. The passenger facility charges that will result from defederalization have only been discussed in the context of the airline passenger. There has been no thought given to the way in which they may apply to general aviation.

While a convincing case can be made for some states to administer selected airport funds, we are concerned about the airports in those states that would not qualify to administer such a program. We urge you to examine these issues in depth before any of them are adopted.

Since airport and airway planning and improvement is such a long term process, NATA sees no reason to limit the term of the reauthorization to less than five years.

History has shown that the best conceived funding program simply will not work as planned without effective protections and strong incentives to ensure that annual appropriations equal levels authorized. During the past five-year program, we have all learned a lot about penalties. As you will recall, NATA was a leading advocate of the so-called "two-for-one" penalty, and we are pleased it worked when appropriations fell short of authorization legislation.

Even with the retention of the two-for-one penalty, we feel additional incentives must be included to ensure adequate spending. NATA supports taking the Trust Fund off budget. We also encourage implementation of a trigger tax to reduce tax rates on an annual basis if appropriations do not meet authorizations. Even though our Members are tax collection agents, and would be forced to adapt to changes in tax rates on an annual basis, they are willing to play that role to help ensure full spending.

One final issue of concern to NATA Members is the Trust Fund contribution to FAA's operations and maintenance expense. Fixed base and air taxi operators remember the original intent of this Act—to provide funds for capital improvements. They have been witnesses to the continuous attempts over the years to redirect the Trust Fund to pay for operations. Our Members would prefer a program that is exclusively capital intensive with no contribution to O & M. Such a program, of course, could be funded with greatly decreased taxes.

We realize that this type of program will never be enacted, but many of our Members still advocate this approach. At any rate, NATA Members are unanimous in their opposition to the Administration's efforts to fund 75 percent of O & M from the Trust Fund.

In summary, Mr. Chairman, the members of NATA appreciate your personal efforts, as well as the efforts of many of your colleagues, to protect aviation users' money. We know you are committed to that philosophy and commend you for it. We look forward to working with you toward that goal.

Sincerely,

LAWRENCE L. BURIAN, *President.*

METROPOLITAN ATLANTA AIRPORTS COUNCIL,
Atlanta GA, April 20, 1987.

Hon. WENDELL FORD,
Chairman, Subcommittee on Aviation, Washington, DC.

DEAR SENATOR FORD: As a representative of twenty-two (22) airports in the Metropolitan Atlanta area I would like to provide some input concerning the reauthorization of the Airport and Airway Improvement Act. We are most interested in passage of new legislation in this regard and in freeing Trust Fund monies for continuing airport development.

We generally concur in the adjusted percentages of apportionment that we understand are included in the Administration's legislative proposal, i.e., reducing large commercial service airports from 50% to 35%. Some of the larger airports have substantially reached reasonable capacity enhancement and these monies can provide a greater return at smaller commercial carrier service and general aviation airports.

The establishment of a separate discretionary fund (33%) for major capacity problems is an excellent idea. The significant point here is the allocation process, to insure that it brings maximum capacity enhancement. Wrong or abused criteria can lead to uneconomical use and the major commercial airports exceeding their original 50% allocation.

The 22% for State Block Grants and 10% for Safety and Security are appropriate.

We recommend that consideration be given to a 5 year reauthorization plan rather than for only 2 years. Five years would allow for stability in a program that moves very slowly.

We also believe that funding 85% of FAA costs from the Trust Fund is not equitable. The national benefits from civil aviation are such that we believe at least 25% of that cost should be supported by the normal tax/budget process and thereby a maximum of 65% of FAA costs should be supported by the Trust Fund.

We appreciate the opportunity of communicating our views and we look forward to completion of the legislative process in this regard.

Sincerely,

ROBERT H. SPRAYBERRY, *Chairman.*

AMERICAN AUTOMOBILE ASSOCIATION,
Falls Church, VA, April 30, 1987.

Hon. WENDELL H. FORD,
Chairman, Subcommittee on Aviation, Washington, DC.

DEAR MR. CHAIRMAN: The American Automobile Association, serving 27.5 million members and other travelers, appreciates this opportunity to express our views concerning reauthorization of the Airport and Airway Improvement Act and the Airport and Airway Trust Fund. As one of the nation's largest sellers of air travel, AAA is concerned that the air system be as safe as possible, and that the ticket taxes paid by our members and others be used for their intended purposes.

AAA first congratulates you, Mr. Chairman, on achieving the chair of the Senate Aviation Subcommittee. We look forward to working with you on aviation-related matters.

AAA would like to emphasize two points: (1) our strong support for Senator Nancy Kassebaum's proposal (S. 784) to remove both the Highway Trust Fund and the Airport and Airway Trust Fund from the unified budget; and (2) our equally strong opposition to head taxes, such as those recently suggested by the Administration.

AAA has been a longtime supporter of the Airport and Airway Trust Fund concept as a means of securing a more modern, efficient, and safe air transportation system. As you well know, the taxes paid into the trust fund are true user fees, collected in advance of expenditures. Thus, expenditures from the fund do not, indeed cannot, contribute to the federal deficit.

Unfortunately, that fact has been clouded by continuing to link trust fund expenditures with the overall effort to reduce the nation's deficit. As a result, the eight percent ticket tax and the three dollar departure fee that continue to be paid by air travelers for a safe and improved air system have instead been allowed to accumulate while the air system deteriorates.

AAA believes that taking the Airport and Airway Trust Fund off-budget is the only way to ensure that the money will be used for its intended purposes. We strongly support, therefore, Senator Nancy Kassebaum's proposal (S. 784) to remove both the Highway Trust Fund and the Airport and Airway Trust Fund from the unified budget. AAA believes that taking the Airport and Airway Trust Fund off-budget is the only way to ensure that the money will be used for its intended purposes.

AAA's second concern is the Administration's proposal (S. 586) to allow certain airports that want to opt out of the federal airport grant program to collect a passenger facility charge from passengers using that airport. AAA strongly opposes such head taxes for two reasons:

First, an airport head tax is unfair because it constitutes a double tax on air passengers. Any passenger purchasing domestic air transportation must pay the eight percent ticket tax which was enacted to fund airport and airway improvements. To require that passenger to pay another tax for airport improvement means that he would be taxed twice for the same thing. The Senate Report (S. Rept. 93-12) to the Airport Development Acceleration Act of 1973, which prohibited head taxes, stated the matter succinctly: "Congress . . . established a uniform national program of taxation and funding for airport improvements. This committee never intended that air travelers would be subject to state and local taxes as well as to national user charges."

". . . (S)tate and local head taxes constitute an inequitable, double burden of taxation on air passengers. Obviously, this runs counter to the whole concept of uniformity underlying the Airport and Airways Development Act, and the maintenance of a unified air transportation system."

Second, AAA also opposes the head tax proposal as a practical matter. The proliferation of fare levels offered by airlines today already makes a travel agent's work difficult and challenging. To require travel agents also to keep track of numerous airport head taxes would be extremely burdensome. Moreover, route or destination changes, cancellations, or even en route changes in airports due to weather conditions would cause administrative nightmares for travel agents who may be required to refund, or at least procure the refund of, an "unused" head tax.

On the other hand, if the head tax is to be collected at the airport, it would only contribute to the delays already surrounding air travel.

For these reasons, AAA believes that changing the law to permit airports to impose head taxes is a very bad idea. It is unfair and could cause untold chaos and delay in air travel.

Again, Mr. Chairman, AAA thanks you for this opportunity to express our views. We hope our comments will be useful to you in your deliberations, and ask that you include them in the subcommittee's hearing record.

Sincerely,

JOHN ARCHER,
Managing Director, Government Affairs.

TRAVEL AND TOURISM GOVERNMENT AFFAIRS COUNCIL,
Washington, DC, April 30, 1987.

Hon. WENDELL H. FORD,
Chairman, Subcommittee on Aviation, Washington, DC.

DEAR CHAIRMAN FORD: The Travel and Tourism Government Affairs Council appreciates this opportunity to present comment for the record, on reauthorization of the Airport and Airway Improvement Act and the Airport and Airway Trust Fund.

Travel and tourism is the third largest retail industry in the United States, behind only automobile dealers and food stores. As the second largest private employer in the nation, the industry employs nearly 7 million American workers, creating 360,000 new jobs in 1986. That same year, federal, state and local governments received over $33 billion in travel-generated tax revenue.

The economic benefits derived from tourism, however, cannot grow or even be sustained without a safe, reliable and efficient air transportation system. Consequently, we are concerned, as we have been for some time, that the federal air transportation infrastructure is inadequate and can only grow worse in proportion to quickly increasing demand.

This is particularly distressing in light of the fact that airlines and their passengers have, for several years now, continued to provide funding for badly needed improvements that quite obviously have not materialized.

By necessity, our nation's air transportation system must be a partnership of industry and government. We in the travel industry fully support the concept of federal Air Traffic Control and similar services being funded from user fees. Yet for the past several years, these fees have been allowed to accumulate, producing a $5 billion surplus and being used to offset the federal deficit—unfortunately rendering the trust fund more "fund" than "trust."

We therefore concur with the testimony of the Air Transport Association and the American Automobile Association, that taking the Airport and Airway Trust Fund off budget appears to be the most effective way of ensuring that ticket taxes and departure fees paid in good faith are expended for their rightful purpose.

We are also concerned with respect to the Administration proposal to allow the imposition of state and local head taxes as an alternative to the federal airport grant program. Such a system not only constitutes double taxation but would introduce myriad practical problems. The array of fares and services available to passengers today make ticketing procedures necessarily complex. It would be chaos to add a hodgepodge of varying airport head taxes to tickets subject to momentary changes in destinations and routes. Collecting the tax at the airport will only exacerbate delays.

Finally, Mr. Chairman, we understand that you will shortly be introducing legislation intended to address many of these issues. We are grateful for your concern and we look forward to working with you and your staff as we seek solutions to these problems in the national interest. If we can provide any additional information please do not hesitate to contact us.

Sincerely,

JAMES E. GAFFIGAN, *Executive Director.*

STATE OF MONTANA,
AERONAUTICS BOARD,
April 30, 1987.

Hon. WENDELL H. FORD,
Chairman, Senate Aviation Subcommittee, Washington, DC.

DEAR CHAIRMAN FORD AND COMMITTEE MEMBERS: Although Montana did not actively participate in the hearing you conducted in Denver on April 20, 1987, I do wish to assure you that we are very interested in your committee's decision regarding the issues being heard. I appreciate the opportunity to have Montana's voice considered in your deliberations. These opinions are also expressed on behalf of the Montana Airport Management Association.

It is vital to Montana's citizens and to our economy that we continue to be a part of the national air transportation system, and this can only be accomplished through reauthorization of the Airport Improvememt Program funded from the "aviation users' trust fund" administered by the Federal Aviation Administration.

A very important facet of Montana's link to the national air transportation system is the 1978 Airline Deregulation Act's 419 provision guaranteeing subsidized service to eight of our small communities for ten years. It is imperative that we have this program continued beyond 1988; and, thus, Montana has been actively participating in a national effort toward formulating new legislation to accomplish this goal.

I would also like to address an issue I understand was of specific concern and made a part of the Denver hearing—that being the Stapleton Airport noise issue. The proposed new airport to replace Stapleton has been widely publicized, and, although capacity is given as the primary reason necessitating a new airport, noise has also been cited as an additional factor. Proponents anticipate that the new airport will resolve these key problems. Montana travelers depend greatly on the Denver hub for our link to the national air transportation system. Any action which would place operational restrictions on the air carriers servicing Montana through the Stapleton hub could have an adverse impact on our air service continuing beyond the completion of the new Denver airport. I would, therefore, ask that your committee consider these critical factors in your deliberations.

Sincerely,

TED MATHIS, *Chairman.*

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